

展開 01

(点) (分 秒)

1. 次の式を展開しなさい。(1問4点)

(1) $-3a(a - 4)$

(2) $-3b(b + 5)$

(3) $-a(a + 2)$

(4) $-3x(3x + 4)$

(5) $-m(m - 2)$

(6) $z(2z + 5)$

(7) $-3z(-z + 3)$

(8) $-2y(-4y - 3)$

2. 次の式を展開しなさい。(1問4点)

(1) $-y(4y + 3z)$

(2) $-x(4x - 3y)$

(3) $2x(5x + 4y)$

(4) $-2x(x + y)$

(5) $-3x(-x + 2y)$

(6) $3y(3y + 5z)$

(7) $-4x(x - y)$

(8) $-2b(3b + 2c)$

3. 次の式を展開しなさい。(1問4点)

(1) $3b(2b - 3c)$

(2) $3x(x - y)$

(3) $a(a - 5)$

(4) $-b(3b + 4)$

(5) $2m(5m - 3)$

(6) $3a(-3a + 4)$

(7) $4x(2x - y)$

(8) $4m(-2m - 1)$

(9) $-3y(-2y - 3z)$

展開 01

(点) (分 秒)

1. 次の式を展開しなさい。(1問4点)

(1) $-3a(a-4) - 3a^2 + 12a$

(2) $-3b(b+5) - 3b^2 - 15b$

(3) $-a(a+2) - a^2 - 2a$

(4) $-3x(3x+4) - 9x^2 - 12x$

(5) $-m(m-2) - m^2 + 2m$

(6) $z(2z+5) 2z^2 + 5z$

(7) $-3z(-z+3) 3z^2 - 9z$

(8) $-2y(-4y-3) 8y^2 + 6y$

2. 次の式を展開しなさい。(1問4点)

(1) $-y(4y+3z) - 4y^2 - 3yz$

(2) $-x(4x-3y) - 4x^2 + 3xy$

(3) $2x(5x+4y) 10x^2 + 8xy$

(4) $-2x(x+y) - 2x^2 - 2xy$

(5) $-3x(-x+2y) 3x^2 - 6xy$

(6) $3y(3y+5z) 9y^2 + 15yz$

(7) $-4x(x-y) - 4x^2 + 4xy$

(8) $-2b(3b+2c) - 6b^2 - 4bc$

3. 次の式を展開しなさい。(1問4点)

(1) $3b(2b-3c) 6b^2 - 9bc$

(2) $3x(x-y) 3x^2 - 3xy$

(3) $a(a-5) a^2 - 5a$

(4) $-b(3b+4) - 3b^2 - 4b$

(5) $2m(5m-3) 10m^2 - 6m$

(6) $3a(-3a+4) - 9a^2 + 12a$

(7) $4x(2x-y) 8x^2 - 4xy$

(8) $4m(-2m-1) - 8m^2 - 4m$

(9) $-3y(-2y-3z) 6y^2 + 9yz$

展開 02

(点) (分 秒)

1. 次の式を展開しなさい。(1問4点)

(1) $(y + 5)^2$

(2) $(x - 4)^2$

(3) $(x + 3)^2$

(4) $(b - 4)^2$

(5) $(y - 6)^2$

(6) $(x + 7)^2$

2. 次の式を展開しなさい。(1問4点)

(1) $(y + 3)(y + 4)$

(2) $(y - 5)(y - 1)$

(3) $(y + 3)(y + 5)$

(4) $(b - 5)(b - 1)$

(5) $(x + 1)(x - 6)$

(6) $(y - 7)(y + 3)$

(7) $(a - 9)(a - 1)$

(8) $(b + 5)(b + 1)$

(9) $(a + 8)(a + 1)$

3. 次の式を展開しなさい。(1問4点)

(1) $(x + 4)(x - 4)$

(2) $(x + 1)(x - 1)$

(3) $(x - 7)(x + 7)$

(4) $(x + 1)(x - 1)$

4. 次の式を展開しなさい。(1問4点)

(1) $(b + 3)(b + 4)$

(2) $(y - 1)(y + 1)$

(3) $(b - 1)^2$

(4) $(y + 1)(y + 9)$

(5) $(x + 5)^2$

(6) $(a - 3)(a + 3)$

展開 02

(点) (分 秒)

1. 次の式を展開しなさい。(1問4点)

(1) $(y + 5)^2 = y^2 + 10y + 25$

(2) $(x - 4)^2 = x^2 - 8x + 16$

(3) $(x + 3)^2 = x^2 + 6x + 9$

(4) $(b - 4)^2 = b^2 - 8b + 16$

(5) $(y - 6)^2 = y^2 - 12y + 36$

(6) $(x + 7)^2 = x^2 + 14x + 49$

2. 次の式を展開しなさい。(1問4点)

(1) $(y + 3)(y + 4) = y^2 + 7y + 12$

(2) $(y - 5)(y - 1) = y^2 - 6y + 5$

(3) $(y + 3)(y + 5) = y^2 + 8y + 15$

(4) $(b - 5)(b - 1) = b^2 - 6b + 5$

(5) $(x + 1)(x - 6) = x^2 - 5x - 6$

(6) $(y - 7)(y + 3) = y^2 - 4y - 21$

(7) $(a - 9)(a - 1) = a^2 - 10a + 9$

(8) $(b + 5)(b + 1) = b^2 + 6b + 5$

(9) $(a + 8)(a + 1) = a^2 + 9a + 8$

3. 次の式を展開しなさい。(1問4点)

(1) $(x + 4)(x - 4) = x^2 - 16$

(2) $(x + 1)(x - 1) = x^2 - 1$

(3) $(x - 7)(x + 7) = x^2 - 49$

(4) $(x + 1)(x - 1) = x^2 - 1$

4. 次の式を展開しなさい。(1問4点)

(1) $(b + 3)(b + 4) = b^2 + 7b + 12$

(2) $(y - 1)(y + 1) = y^2 - 1$

(3) $(b - 1)^2 = b^2 - 2b + 1$

(4) $(y + 1)(y + 9) = y^2 + 10y + 9$

(5) $(x + 5)^2 = x^2 + 10x + 25$

(6) $(a - 3)(a + 3) = a^2 - 9$

展開 03

(点) (分 秒)

1. 次の式を展開しなさい。(1問4点)

(1) $(5y - 4)^2$

(2) $(5x - 1)^2$

(3) $(2x - 7)^2$

(4) $(2y + 7)^2$

(5) $(3x + 5)^2$

(6) $(5a + 4)^2$

2. 次の式を展開しなさい。(1問4点)

(1) $(2x - 3)(2x + 5)$

(2) $(3a - 4)(3a - 1)$

(3) $(5a + 2)(5a + 4)$

(4) $(5y - 2)(5y + 4)$

(5) $(2x + 7)(2x + 1)$

(6) $(2x - 1)(2x + 7)$

(7) $(5y + 1)(5y - 2)$

(8) $(3x - 2)(3x + 4)$

(9) $(3x + 5)(3x - 1)$

3. 次の式を展開しなさい。(1問4点)

(1) $(5a - 2)(5a + 2)$

(2) $(2a + 3)(2a - 3)$

(3) $(5a - 1)(5a + 1)$

(4) $(2x + 5)(2x - 5)$

4. 次の式を展開しなさい。(1問4点)

(1) $(5y + 1)(5y + 4)$

(2) $(5x + 2)(5x - 4)$

(3) $(2b + 1)(2b + 5)$

(4) $(2b + 5)(2b - 3)$

(5) $(2b + 5)(2b - 5)$

(6) $(5y + 3)^2$

展開 03

(点) (分 秒)

1. 次の式を展開しなさい。(1問4点)

- (1) $(5y - 4)^2 = 25y^2 - 40y + 16$ (2) $(5x - 1)^2 = 25x^2 - 10x + 1$
- (3) $(2x - 7)^2 = 4x^2 - 28x + 49$ (4) $(2y + 7)^2 = 4y^2 + 28y + 49$
- (5) $(3x + 5)^2 = 9x^2 + 30x + 25$ (6) $(5a + 4)^2 = 25a^2 + 40a + 16$

2. 次の式を展開しなさい。(1問4点)

- (1) $(2x - 3)(2x + 5) = 4x^2 + 4x - 15$ (2) $(3a - 4)(3a - 1) = 9a^2 - 15a + 4$
- (3) $(5a + 2)(5a + 4)$
 $= 25a^2 + 30a + 8$ (4) $(5y - 2)(5y + 4)$
 $= 25y^2 + 10y - 8$
- (5) $(2x + 7)(2x + 1) = 4x^2 + 16x + 7$ (6) $(2x - 1)(2x + 7) = 4x^2 + 12x - 7$
- (7) $(5y + 1)(5y - 2) = 25y^2 - 5y - 2$ (8) $(3x - 2)(3x + 4) = 9x^2 + 6x - 8$
- (9) $(3x + 5)(3x - 1) = 9x^2 + 12x - 5$

3. 次の式を展開しなさい。(1問4点)

- (1) $(5a - 2)(5a + 2) = 25a^2 - 4$ (2) $(2a + 3)(2a - 3) = 4a^2 - 9$
- (3) $(5a - 1)(5a + 1) = 25a^2 - 1$ (4) $(2x + 5)(2x - 5) = 4x^2 - 25$

4. 次の式を展開しなさい。(1問4点)

- (1) $(5y + 1)(5y + 4)$
 $= 25y^2 + 25y + 4$ (2) $(5x + 2)(5x - 4)$
 $= 25x^2 - 10x - 8$
- (3) $(2b + 1)(2b + 5) = 4b^2 + 12b + 5$ (4) $(2b + 5)(2b - 3) = 4b^2 + 4b - 15$
- (5) $(2b + 5)(2b - 5) = 4b^2 - 25$ (6) $(5y + 3)^2 = 25y^2 + 30y + 9$

展開 04

(点) (分 秒)

1. 次の式を展開しなさい。(1問4点)

(1) $3b(3b + 5c)$

(2) $-3x(x + 2y)$

(3) $-3c(c + 4)$

(4) $-2z(-3z + 4)$

(5) $p(-2p + 3q)$

2. 次の式を展開しなさい。(1問4点)

(1) $(5x + 3)^2$

(2) $(3x - 5)^2$

(3) $(3x - 2)^2$

(4) $(5x + 4)(5x + 1)$

(5) $(3b - 1)(3b - 2)$

(6) $(5y + 2)(5y - 2)$

(7) $(5x + 1)(5x - 1)$

(8) $(5x + 4)(5x - 3)$

(9) $(5x - 1)(5x + 3)$

(10) $(2x + 1)^2$

(11) $(2x + 3)(2x - 5)$

(12) $(3x + 1)(3x - 1)$

(13) $(5b - 1)^2$

(14) $(3x + 5)(3x - 1)$

(15) $(5x + 3)(5x - 3)$

(16) $(5a - 2)^2$

(17) $(5x + 1)(5x + 3)$

(18) $(5x + 1)(5x - 3)$

(19) $(5x - 1)(5x + 1)$

(20) $(3b - 4)(3b + 2)$

展開 04

(点) (分 秒)

1. 次の式を展開しなさい。(1問4点)

(1) $3b(3b + 5c)$ **$9b^2 + 15bc$**

(2) $-3x(x + 2y)$ **$-3x^2 - 6xy$**

(3) $-3c(c + 4)$ **$-3c^2 - 12c$**

(4) $-2z(-3z + 4)$ **$6z^2 - 8z$**

(5) $p(-2p + 3q)$ **$-2p^2 + 3pq$**

2. 次の式を展開しなさい。(1問4点)

(1) $(5x + 3)^2$ **$= 25x^2 + 30x + 9$**

(2) $(3x - 5)^2$ **$= 9x^2 - 30x + 25$**

(3) $(3x - 2)^2$ **$= 9x^2 - 12x + 4$**

(4) $(5x + 4)(5x + 1)$
 $= 25x^2 + 25x + 4$

(5) $(3b - 1)(3b - 2)$ **$= 9b^2 - 9b + 2$**

(6) $(5y + 2)(5y - 2)$ **$= 25y^2 - 4$**

(7) $(5x + 1)(5x - 1)$ **$= 25x^2 - 1$**

(8) $(5x + 4)(5x - 3)$
 $= 25x^2 + 5x - 12$

(9) $(5x - 1)(5x + 3)$
 $= 25x^2 + 10x - 3$

(10) $(2x + 1)^2$ **$= 4x^2 + 4x + 1$**

(11) $(2x + 3)(2x - 5)$ **$= 4x^2 - 4x - 15$**

(12) $(3x + 1)(3x - 1)$ **$= 9x^2 - 1$**

(13) $(5b - 1)^2$ **$= 25b^2 - 10b + 1$**

(14) $(3x + 5)(3x - 1)$ **$= 9x^2 + 12x - 5$**

(15) $(5x + 3)(5x - 3)$ **$= 25x^2 - 9$**

(16) $(5a - 2)^2$ **$= 25a^2 - 20a + 4$**

(17) $(5x + 1)(5x + 3)$
 $= 25x^2 + 20x + 3$

(18) $(5x + 1)(5x - 3)$
 $= 25x^2 - 10x - 3$

(19) $(5x - 1)(5x + 1)$ **$= 25x^2 - 1$**

(20) $(3b - 4)(3b + 2)$ **$= 9b^2 - 6b - 8$**

展開 05

(点) (分 秒)

次の式を展開しなさい。(1問5点)

(1) $(b - 1)(b + 1)$

(2) $(a + \frac{2}{3})(a - 4)$

(3) $(b - 2)^2$

(4) $(a + 1)(a - 2)$

(5) $(x - 2)(x + 3)$

(6) $(x - 3)(x - 2)$

(7) $(x - \frac{4}{3})(x + 1)$

(8) $(x - \frac{3}{5})(x + \frac{3}{5})$

(9) $(a + \frac{1}{5})(a + \frac{3}{2})$

(10) $(x + \frac{7}{5})(x + \frac{5}{2})$

(11) $(2x + \frac{8}{3})^2$

(12) $(3y - \frac{3}{2})(3y + 3)$

(13) $(2a + \frac{3}{2})^2$

(14) $(3a + \frac{3}{2})(3a + 1)$

(15) $(5y + \frac{8}{3})(5y + \frac{3}{2})$

(16) $(4a - \frac{7}{4})^2$

(17) $(2a + \frac{5}{3})(2a - \frac{5}{3})$

(18) $(5y + \frac{4}{3})(5y - \frac{4}{3})$

(19) $(2x - \frac{3}{2})(2x + \frac{3}{2})$

(20) $(4a - \frac{7}{3})(4a + \frac{7}{3})$

展開 05

() (分 秒)

次の式を展開しなさい。(1問5点)

(1) $(b - 1)(b + 1) = b^2 - 1$

(2) $(a + \frac{2}{3})(a - 4) = a^2 - \frac{10}{3}a - \frac{8}{3}$

(3) $(b - 2)^2 = b^2 - 4b + 4$

(4) $(a + 1)(a - 2) = a^2 - a - 2$

(5) $(x - 2)(x + 3) = x^2 + x - 6$

(6) $(x - 3)(x - 2) = x^2 - 5x + 6$

(7) $(x - \frac{4}{3})(x + 1) = x^2 - \frac{1}{3}x - \frac{4}{3}$

(8) $(x - \frac{3}{5})(x + \frac{3}{5}) = x^2 - \frac{9}{25}$

(9) $(a + \frac{1}{5})(a + \frac{3}{2})$
 $= a^2 + \frac{17}{10}a + \frac{3}{10}$

(10) $(x + \frac{7}{5})(x + \frac{5}{2})$
 $= x^2 + \frac{39}{10}x + \frac{7}{2}$

(11) $(2x + \frac{8}{3})^2 = 4x^2 + \frac{32}{3}x + \frac{64}{9}$

(12) $(3y - \frac{3}{2})(3y + 3)$
 $= 9y^2 + \frac{9}{2}y - \frac{9}{2}$

(13) $(2a + \frac{3}{2})^2 = 4a^2 + 6a + \frac{9}{4}$

(14) $(3a + \frac{3}{2})(3a + 1)$
 $= 9a^2 + \frac{15}{2}a + \frac{3}{2}$

(15) $(5y + \frac{8}{3})(5y + \frac{3}{2})$
 $= 25y^2 + \frac{125}{6}y + 4$

(16) $(4a - \frac{7}{4})^2 = 16a^2 - 14a + \frac{49}{16}$

(17) $(2a + \frac{5}{3})(2a - \frac{5}{3}) = 4a^2 - \frac{25}{9}$

(18) $(5y + \frac{4}{3})(5y - \frac{4}{3}) = 25y^2 - \frac{16}{9}$

(19) $(2x - \frac{3}{2})(2x + \frac{3}{2}) = 4x^2 - \frac{9}{4}$

(20) $(4a - \frac{7}{3})(4a + \frac{7}{3}) = 16a^2 - \frac{49}{9}$

因数分解 01

(点) (分 秒)

1. 次の式を因数分解しなさい。(1問4点)

(1) $-3z^2 - 4z$

(2) $2b^2 - 2b$

(3) $-z^2 + 5z$

(4) $-b^2 + b$

(5) $-4x^2 + 20x$

(6) $3m^2 - 4m$

(7) $-3x^2 - 3x$

(8) $-2b^2 + 2b$

2. 次の式を因数分解しなさい。(1問4点)

(1) $9x^2 - 6xy$

(2) $-3m^2 - 9mn$

(3) $p^2 + 3pq$

(4) $-y^2 - 2yz$

(5) $a^2 + ab$

(6) $-2y^2 - 2yz$

(7) $-12b^2 - 15bc$

(8) $3x^2 + 5xy$

3. 次の式を因数分解しなさい。(1問4点)

(1) $-12m^2 - 9m$

(2) $-3m^2 + 15m$

(3) $-3x^2 - 3xy$

(4) $-3y^2 - 9yz$

(5) $-x^2 - xy$

(6) $-4y^2 - 8yz$

(7) $-9n^2 - 6n$

(8) $16n^2 + 20n$

(9) $-12a^2 - 15ab$

因数分解 01

(点) (分 秒)

1. 次の式を因数分解しなさい。(1問4点)

(1) $-3z^2 - 4z \quad -z(3z + 4)$

(2) $2b^2 - 2b \quad 2b(b - 1)$

(3) $-z^2 + 5z \quad -z(z - 5)$

(4) $-b^2 + b \quad -b(b - 1)$

(5) $-4x^2 + 20x \quad -4x(x - 5)$

(6) $3m^2 - 4m \quad -m(-3m + 4)$

(7) $-3x^2 - 3x \quad 3x(-x - 1)$

(8) $-2b^2 + 2b \quad 2b(-b + 1)$

2. 次の式を因数分解しなさい。(1問4点)

(1) $9x^2 - 6xy \quad 3x(3x - 2y)$

(2) $-3m^2 - 9mn \quad -3m(m + 3n)$

(3) $p^2 + 3pq \quad p(p + 3q)$

(4) $-y^2 - 2yz \quad -y(y + 2z)$

(5) $a^2 + ab \quad a(a + b)$

(6) $-2y^2 - 2yz \quad -2y(y + z)$

(7) $-12b^2 - 15bc \quad -3b(4b + 5c)$

(8) $3x^2 + 5xy \quad x(3x + 5y)$

3. 次の式を因数分解しなさい。(1問4点)

(1) $-12m^2 - 9m \quad -3m(4m + 3)$

(2) $-3m^2 + 15m \quad -3m(m - 5)$

(3) $-3x^2 - 3xy \quad -3x(x + y)$

(4) $-3y^2 - 9yz \quad -3y(y + 3z)$

(5) $-x^2 - xy \quad -x(x + y)$

(6) $-4y^2 - 8yz \quad -4y(y + 2z)$

(7) $-9n^2 - 6n \quad -3n(3n + 2)$

(8) $16n^2 + 20n \quad -4n(-4n - 5)$

(9) $-12a^2 - 15ab \quad -3a(4a + 5b)$

因数分解 02

(点) (分 秒)

1. 次の式を因数分解しなさい。(1問4点)

(1) $x^2 - 6x + 9$

(2) $x^2 - 4x + 4$

(3) $a^2 - 10a + 25$

(4) $b^2 + 10b + 25$

(5) $x^2 - 4x + 4$

(6) $x^2 - 12x + 36$

2. 次の式を因数分解しなさい。(1問4点)

(1) $a^2 - 2a - 15$

(2) $a^2 - a - 12$

(3) $b^2 + 5b + 6$

(4) $x^2 + 4x - 5$

(5) $b^2 - 15b + 54$

(6) $x^2 - 14x + 45$

(7) $x^2 - 2x - 8$

(8) $x^2 + 7x - 18$

(9) $a^2 + 6a - 16$

3. 次の式を因数分解しなさい。(1問4点)

(1) $b^2 - 9$

(2) $x^2 - 9$

(3) $y^2 - 9$

(4) $x^2 - 81$

4. 次の式を因数分解しなさい。(1問4点)

(1) $x^2 - 25$

(2) $b^2 - 3b - 10$

(3) $a^2 - 9$

(4) $x^2 + 18x + 81$

(5) $x^2 - 14x + 49$

(6) $a^2 - 2a - 63$

因数分解 02

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1. 次の式を因数分解しなさい。(1問4点)

(1) $x^2 - 6x + 9$ $(x - 3)^2$

(2) $x^2 - 4x + 4$ $(x - 2)^2$

(3) $a^2 - 10a + 25$ $(a - 5)^2$

(4) $b^2 + 10b + 25$ $(b + 5)^2$

(5) $x^2 - 4x + 4$ $(x - 2)^2$

(6) $x^2 - 12x + 36$ $(x - 6)^2$

2. 次の式を因数分解しなさい。(1問4点)

(1) $a^2 - 2a - 15$ $(a - 5)(a + 3)$

(2) $a^2 - a - 12$ $(a - 4)(a + 3)$

(3) $b^2 + 5b + 6$ $(b + 2)(b + 3)$

(4) $x^2 + 4x - 5$ $(x + 5)(x - 1)$

(5) $b^2 - 15b + 54$ $(b - 9)(b - 6)$

(6) $x^2 - 14x + 45$ $(x - 9)(x - 5)$

(7) $x^2 - 2x - 8$ $(x + 2)(x - 4)$

(8) $x^2 + 7x - 18$ $(x - 2)(x + 9)$

(9) $a^2 + 6a - 16$ $(a + 8)(a - 2)$

3. 次の式を因数分解しなさい。(1問4点)

(1) $b^2 - 9$ $(b + 3)(b - 3)$

(2) $x^2 - 9$ $(x - 3)(x + 3)$

(3) $y^2 - 9$ $(y - 3)(y + 3)$

(4) $x^2 - 81$ $(x + 9)(x - 9)$

4. 次の式を因数分解しなさい。(1問4点)

(1) $x^2 - 25$ $(x + 5)(x - 5)$

(2) $b^2 - 3b - 10$ $(b + 2)(b - 5)$

(3) $a^2 - 9$ $(a + 3)(a - 3)$

(4) $x^2 + 18x + 81$ $(x + 9)^2$

(5) $x^2 - 14x + 49$ $(x - 7)^2$

(6) $a^2 - 2a - 63$ $(a - 9)(a + 7)$

因数分解 03

(点) (分 秒)

1. 次の式を因数分解しなさい。(1問4点)

(1) $9b^2 - 30b + 25$

(2) $9y^2 + 6y + 1$

(3) $25b^2 - 20b + 4$

(4) $9y^2 + 24y + 16$

2. 次の式を因数分解しなさい。(1問4点)

(1) $x^2 + 7x + 12$

(2) $a^2 + 7a - 8$

(3) $x^2 - 11x + 28$

(4) $b^2 - 7b + 10$

(5) $y^2 + 5y - 36$

(6) $y^2 + 2y - 24$

3. 次の式を因数分解しなさい。(1問4点)

(1) $25x^2 - 16$

(2) $4a^2 - 9$

(3) $4a^2 - 1$

(4) $25a^2 - 9$

4. 次の式を因数分解しなさい。(1問4点)

(1) $x^2 - 17x + 72$

(2) $x^2 + 11x + 28$

(3) $25y^2 - 10y + 1$

(4) $a^2 - 3a - 10$

(5) $9a^2 - 24a + 16$

(6) $25x^2 + 20x + 4$

(7) $x^2 - 11x + 30$

(8) $x^2 + 3x - 10$

(9) $a^2 + 8a + 7$

(10) $x^2 + 12x + 32$

(11) $25a^2 + 30a + 9$

因数分解 03

() (分 秒)

1. 次の式を因数分解しなさい。(1問4点)

(1) $9b^2 - 30b + 25$ $(3b - 5)^2$

(2) $9y^2 + 6y + 1$ $(3y + 1)^2$

(3) $25b^2 - 20b + 4$ $(5b - 2)^2$

(4) $9y^2 + 24y + 16$ $(3y + 4)^2$

2. 次の式を因数分解しなさい。(1問4点)

(1) $x^2 + 7x + 12$ $(x + 4)(x + 3)$

(2) $a^2 + 7a - 8$ $(a + 8)(a - 1)$

(3) $x^2 - 11x + 28$ $(x - 7)(x - 4)$

(4) $b^2 - 7b + 10$ $(b - 2)(b - 5)$

(5) $y^2 + 5y - 36$ $(y + 9)(y - 4)$

(6) $y^2 + 2y - 24$ $(y - 4)(y + 6)$

3. 次の式を因数分解しなさい。(1問4点)

(1) $25x^2 - 16$ $(5x - 4)(5x + 4)$

(2) $4a^2 - 9$ $(2a - 3)(2a + 3)$

(3) $4a^2 - 1$ $(2a + 1)(2a - 1)$

(4) $25a^2 - 9$ $(5a - 3)(5a + 3)$

4. 次の式を因数分解しなさい。(1問4点)

(1) $x^2 - 17x + 72$ $(x - 8)(x - 9)$

(2) $x^2 + 11x + 28$ $(x + 7)(x + 4)$

(3) $25y^2 - 10y + 1$ $(5y - 1)^2$

(4) $a^2 - 3a - 10$ $(a - 5)(a + 2)$

(5) $9a^2 - 24a + 16$ $(3a - 4)^2$

(6) $25x^2 + 20x + 4$ $(5x + 2)^2$

(7) $x^2 - 11x + 30$ $(x - 5)(x - 6)$

(8) $x^2 + 3x - 10$ $(x + 5)(x - 2)$

(9) $a^2 + 8a + 7$ $(a + 7)(a + 1)$

(10) $x^2 + 12x + 32$ $(x + 8)(x + 4)$

(11) $25a^2 + 30a + 9$ $(5a + 3)^2$

因数分解 04

(点) (分 秒)

1. 次の式を因数分解しなさい。(1問4点)

(1) $2a^2 + 4ab$

(2) $-3b^2 - 3b$

(3) $-y^2 + 4yz$

(4) $2x^2 - 3xy$

(5) $6m^2 + 4m$

2. 次の式を因数分解しなさい。(1問4点)

(1) $4y^2 - 49$

(2) $x^2 + 2x - 15$

(3) $y^2 + 9y + 20$

(4) $x^2 - 10x + 21$

(5) $a^2 - 3a - 18$

(6) $x^2 - 10x + 9$

(7) $y^2 + 7y + 12$

(8) $9b^2 - 4$

(9) $x^2 + 3x - 54$

(10) $x^2 + 5x + 4$

(11) $x^2 + 9x + 18$

(12) $x^2 + 14x + 45$

(13) $9x^2 - 25$

(14) $9y^2 + 12y + 4$

(15) $y^2 + 11y + 18$

(16) $x^2 - 3x - 18$

(17) $y^2 + 10y + 16$

(18) $9x^2 + 24x + 16$

(19) $9a^2 - 16$

(20) $y^2 + 2y - 8$

因数分解 04

(点) (分 秒)

1. 次の式を因数分解しなさい。(1問4点)

(1) $2a^2 + 4ab$ **$2a(a + 2b)$**

(2) $-3b^2 - 3b$ **$-3b(b + 1)$**

(3) $-y^2 + 4yz$ **$-y(y - 4z)$**

(4) $2x^2 - 3xy$ **$x(2x - 3y)$**

(5) $6m^2 + 4m$ **$2m(3m + 2)$**

2. 次の式を因数分解しなさい。(1問4点)

(1) $4y^2 - 49$ **$(2y + 7)(2y - 7)$**

(2) $x^2 + 2x - 15$ **$(x - 3)(x + 5)$**

(3) $y^2 + 9y + 20$ **$(y + 5)(y + 4)$**

(4) $x^2 - 10x + 21$ **$(x - 3)(x - 7)$**

(5) $a^2 - 3a - 18$ **$(a + 3)(a - 6)$**

(6) $x^2 - 10x + 9$ **$(x - 1)(x - 9)$**

(7) $y^2 + 7y + 12$ **$(y + 3)(y + 4)$**

(8) $9b^2 - 4$ **$(3b - 2)(3b + 2)$**

(9) $x^2 + 3x - 54$ **$(x + 9)(x - 6)$**

(10) $x^2 + 5x + 4$ **$(x + 4)(x + 1)$**

(11) $x^2 + 9x + 18$ **$(x + 6)(x + 3)$**

(12) $x^2 + 14x + 45$ **$(x + 5)(x + 9)$**

(13) $9x^2 - 25$ **$(3x - 5)(3x + 5)$**

(14) $9y^2 + 12y + 4$ **$(3y + 2)^2$**

(15) $y^2 + 11y + 18$ **$(y + 2)(y + 9)$**

(16) $x^2 - 3x - 18$ **$(x - 6)(x + 3)$**

(17) $y^2 + 10y + 16$ **$(y + 2)(y + 8)$**

(18) $9x^2 + 24x + 16$ **$(3x + 4)^2$**

(19) $9a^2 - 16$ **$(3a + 4)(3a - 4)$**

(20) $y^2 + 2y - 8$ **$(y + 4)(y - 2)$**

2 次方程式 01

(点) (分 秒)

次の 2 次方程式を解きなさい。(1 問 5 点)

(1) $a^2 = 3$

(2) $x^2 = 16$

(3) $x^2 = 30$

(4) $x^2 = 81$

(5) $x^2 = 49$

(6) $x^2 = 36$

(7) $x^2 - 5x - 6 = 0$

(8) $a^2 + 10a + 9 = 0$

(9) $a^2 + 7a = 0$

(10) $x^2 + 10x + 9 = 0$

(11) $x^2 - 12x + 11 = 0$

(12) $x^2 - 8x - 20 = 0$

(13) $a^2 + 10a + 16 = 0$

(14) $x^2 - 8x + 16 = 0$

(15) $x^2 - 3x - 18 = 0$

(16) $x^2 - 12x + 20 = 0$

(17) $x^2 + 12x + 11 = 0$

(18) $a^2 - 8a + 15 = 0$

(19) $a^2 - 10a - 11 = 0$

(20) $x^2 + 9x + 14 = 0$

2 次方程式 01

(点) (分 秒)

次の 2 次方程式を解きなさい。(1 問 5 点)

(1) $a^2 = 3$

$a = \pm\sqrt{3}$

(4) $x^2 = 81$

$x = \pm 9$

(7) $x^2 - 5x - 6 = 0$

$x = 6, -1$

(2) $x^2 = 16$

$x = \pm 4$

(5) $x^2 = 49$

$x = \pm 7$

(8) $a^2 + 10a + 9 = 0$

$a = -9, -1$

(3) $x^2 = 30$

$x = \pm\sqrt{30}$

(6) $x^2 = 36$

$x = \pm 6$

(9) $a^2 + 7a = 0$

$a = 0, -7$

(10) $x^2 + 10x + 9 = 0$

$x = -9, -1$

(11) $x^2 - 12x + 11 = 0$

$x = 11, 1$

(12) $x^2 - 8x - 20 = 0$

$x = 10, -2$

(13) $a^2 + 10a + 16 = 0$

$a = -8, -2$

(14) $x^2 - 8x + 16 = 0$

$x = 4$

(15) $x^2 - 3x - 18 = 0$

$x = 6, -3$

(16) $x^2 - 12x + 20 = 0$

$x = 10, 2$

(17) $x^2 + 12x + 11 = 0$

$x = -11, -1$

(18) $a^2 - 8a + 15 = 0$

$a = 5, 3$

(19) $a^2 - 10a - 11 = 0$

$a = -1, 11$

(20) $x^2 + 9x + 14 = 0$

$x = -7, -2$

2 次方程式 02

(/16) (分 秒)

次の 2 次方程式を解きなさい。

(1) $a^2 = 29$

(2) $x^2 = 17$

(3) $a^2 = 26$

(4) $x^2 - 49 = 0$

(5) $a^2 - 13 = 0$

(6) $x^2 - 20 = 0$

(7) $12x = -x^2 - 11$

(8) $a^2 + 8a = 9$

(9) $x^2 + 4x = 5$

(10) $x^2 + 7x = -10$

(11) $x^2 + 8x + 12 = 0$

(12) $-7x = -x^2 + 8$

(13) $x^2 = 12x - 20$

(14) $a^2 + 10a + 9 = 0$

(15) $a^2 + 5a = 0$

(16) $7x = -x^2 + 8$

2 次方程式 02

(/16) (分 秒)

次の 2 次方程式を解きなさい。

(1) $a^2 = 29$

$$\mathbf{a = \pm\sqrt{29}}$$

(4) $x^2 - 49 = 0$

$$\mathbf{x = \pm 7}$$

(2) $x^2 = 17$

$$\mathbf{x = \pm\sqrt{17}}$$

(5) $a^2 - 13 = 0$

$$\mathbf{a = \pm\sqrt{13}}$$

(3) $a^2 = 26$

$$\mathbf{a = \pm\sqrt{26}}$$

(6) $x^2 - 20 = 0$

$$\mathbf{x = \pm 2\sqrt{5}}$$

(7) $12x = -x^2 - 11$

$$\mathbf{x = -11, -1}$$

(8) $a^2 + 8a = 9$

$$\mathbf{a = -9, 1}$$

(9) $x^2 + 4x = 5$

$$\mathbf{x = -5, 1}$$

(10) $x^2 + 7x = -10$

$$\mathbf{x = -5, -2}$$

(11) $x^2 + 8x + 12 = 0$

$$\mathbf{x = -2, -6}$$

(12) $-7x = -x^2 + 8$

$$\mathbf{x = 8, -1}$$

(13) $x^2 = 12x - 20$

$$\mathbf{x = 10, 2}$$

(14) $a^2 + 10a + 9 = 0$

$$\mathbf{a = -9, -1}$$

(15) $a^2 + 5a = 0$

$$\mathbf{a = 0, -5}$$

(16) $7x = -x^2 + 8$

$$\mathbf{x = -8, 1}$$

2 次方程式 03

(点) (分 秒)

次の 2 次方程式を解きなさい。(1 問 10 点)

$$(1) \frac{1}{6}a^2 - \frac{2}{3}a - \frac{5}{6} = 0$$

$$(2) \frac{3}{4}x^2 - \frac{9}{2}x - 12 = 0$$

$$(3) \frac{1}{3}x^2 + 3x + \frac{8}{3} = 0$$

$$(4) \frac{1}{6}a^2 - \frac{1}{2}a - 3 = 0$$

$$(5) \frac{1}{3}a^2 + \frac{8}{3}a = -5$$

$$(6) \frac{1}{2}x^2 = -5x - 8$$

$$(7) \frac{1}{3}x^2 + 2x + \frac{5}{3} = 0$$

$$(8) \frac{1}{2}x^2 + x - 4 = 0$$

$$(9) \frac{1}{4}x^2 - 2x - \frac{9}{4} = 0$$

$$(10) -\frac{3}{2}x = \frac{1}{2}x^2$$

2 次方程式 03

(点) (分 秒)

次の 2 次方程式を解きなさい。(1 問 10 点)

$$(1) \frac{1}{6}a^2 - \frac{2}{3}a - \frac{5}{6} = 0$$

$$a = 5, -1$$

$$(2) \frac{3}{4}x^2 - \frac{9}{2}x - 12 = 0$$

$$x = 8, -2$$

$$(3) \frac{1}{3}x^2 + 3x + \frac{8}{3} = 0$$

$$x = -1, -8$$

$$(4) \frac{1}{6}a^2 - \frac{1}{2}a - 3 = 0$$

$$a = 6, -3$$

$$(5) \frac{1}{3}a^2 + \frac{8}{3}a = -5$$

$$a = -5, -3$$

$$(6) \frac{1}{2}x^2 = -5x - 8$$

$$x = -8, -2$$

$$(7) \frac{1}{3}x^2 + 2x + \frac{5}{3} = 0$$

$$x = -1, -5$$

$$(8) \frac{1}{2}x^2 + x - 4 = 0$$

$$x = 2, -4$$

$$(9) \frac{1}{4}x^2 - 2x - \frac{9}{4} = 0$$

$$x = 9, -1$$

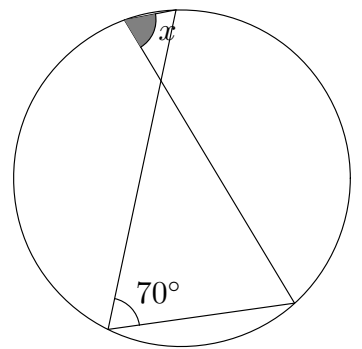
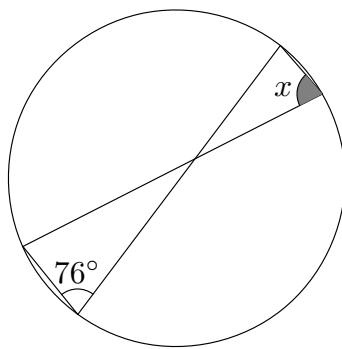
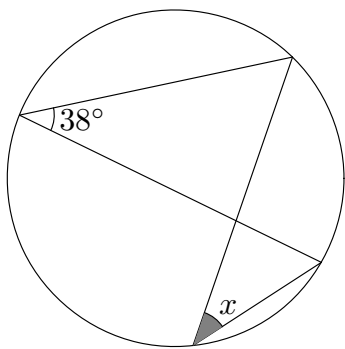
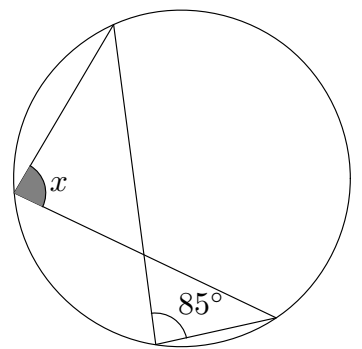
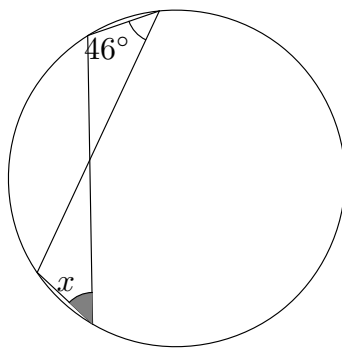
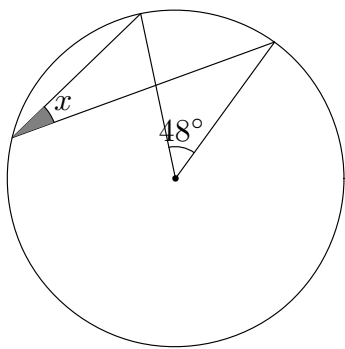
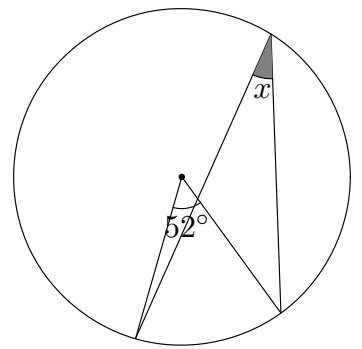
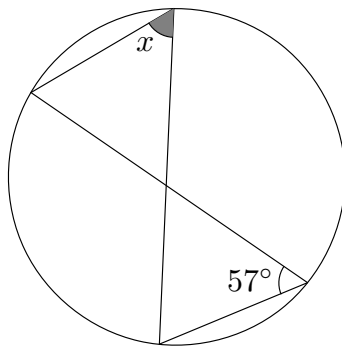
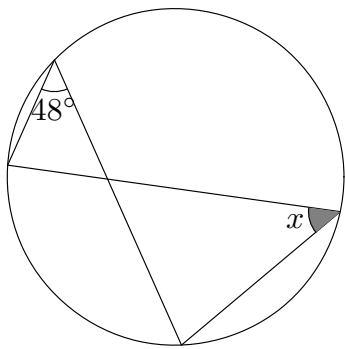
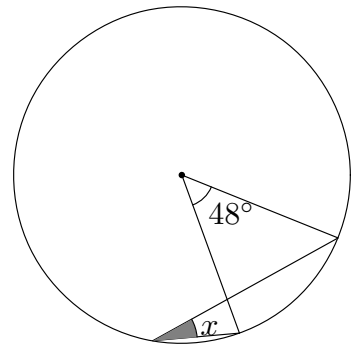
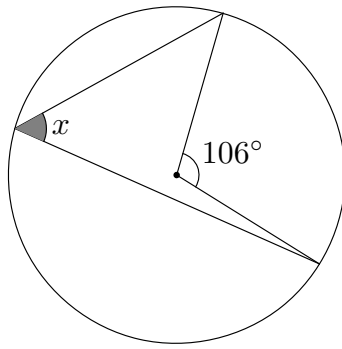
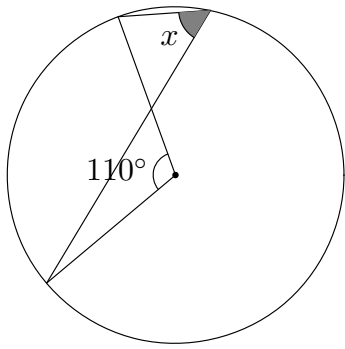
$$(10) -\frac{3}{2}x = \frac{1}{2}x^2$$

$$x = 0, -3$$

円周角 01

名前 () 得点 (/12)

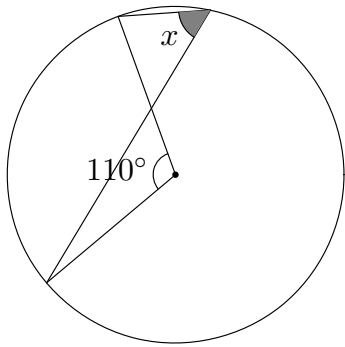
次の角 $\angle x$ の大きさを求めなさい。



円周角 01

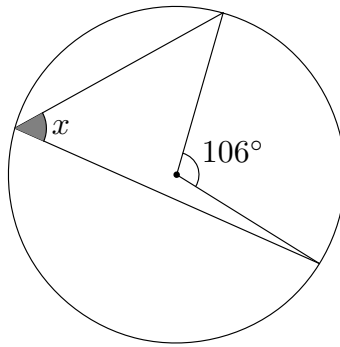
名前 () 得点 (/12)

次の角 $\angle x$ の大きさを求めなさい。



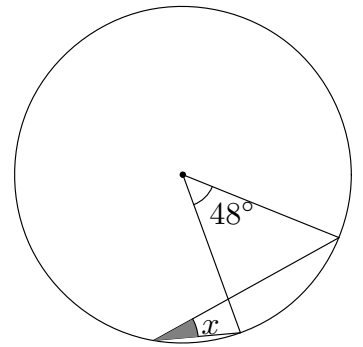
(1)

$x = 55^\circ$



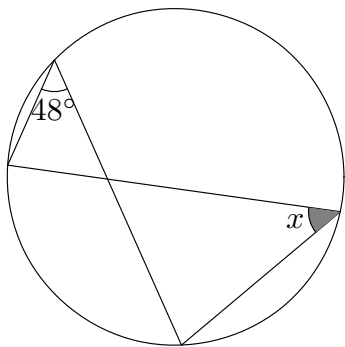
(2)

$x = 53^\circ$



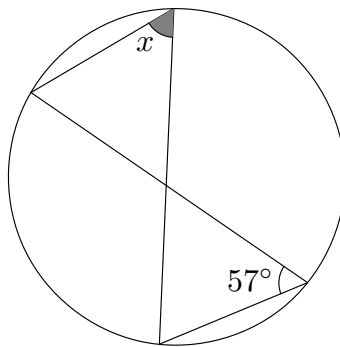
(3)

$x = 24^\circ$



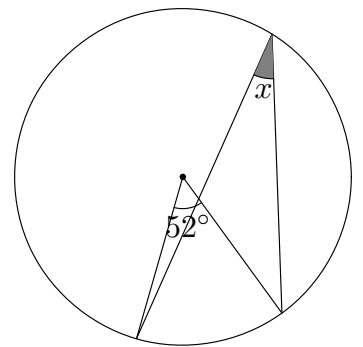
(4)

$x = 48^\circ$



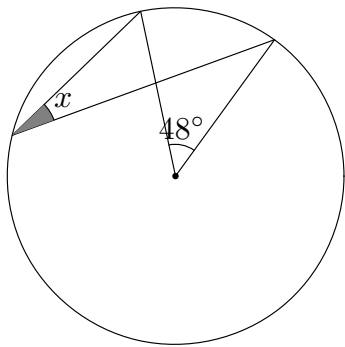
(5)

$x = 57^\circ$



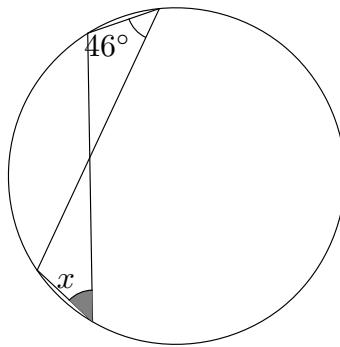
(6)

$x = 26^\circ$



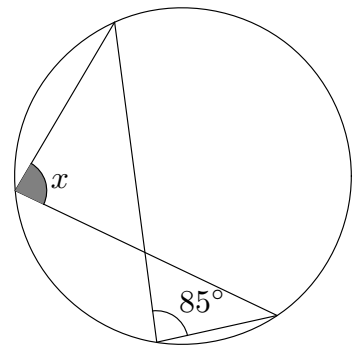
(7)

$x = 24^\circ$



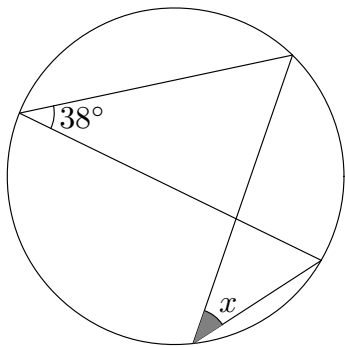
(8)

$x = 46^\circ$



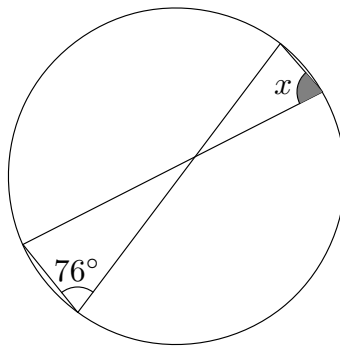
(9)

$x = 85^\circ$



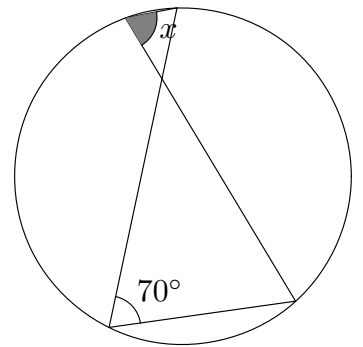
(10)

$x = 38^\circ$



(11)

$x = 76^\circ$



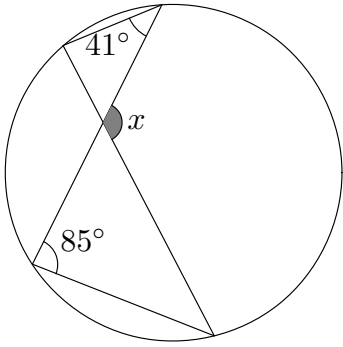
(12)

$x = 70^\circ$

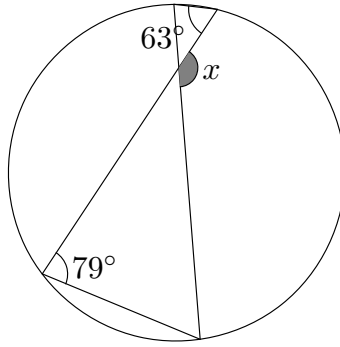
円周角 02

名前 () 得点 (/12)

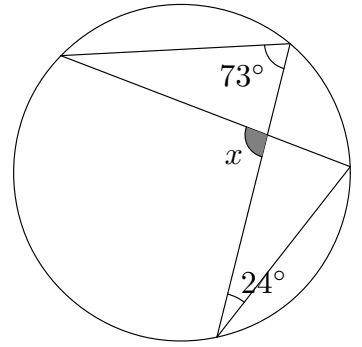
次の角 $\angle x$ の大きさを求めなさい。



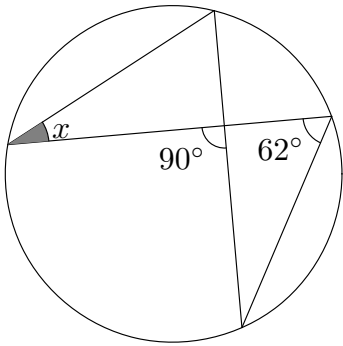
(1)



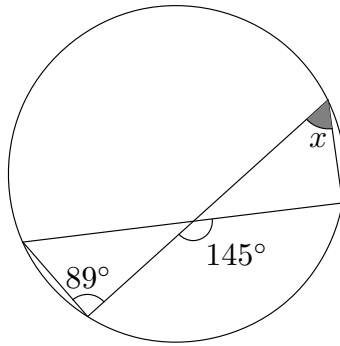
(2)



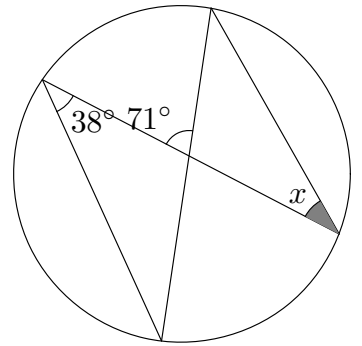
(3)



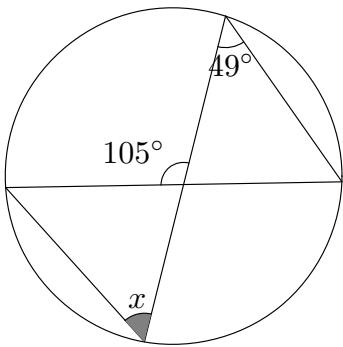
(4)



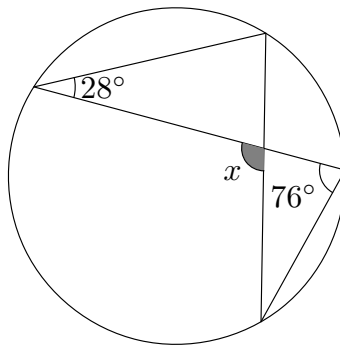
(5)



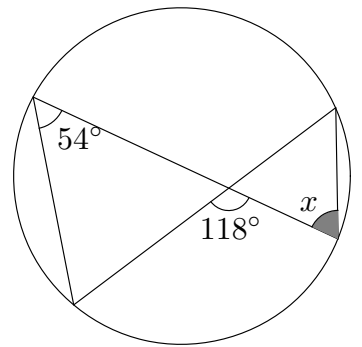
(6)



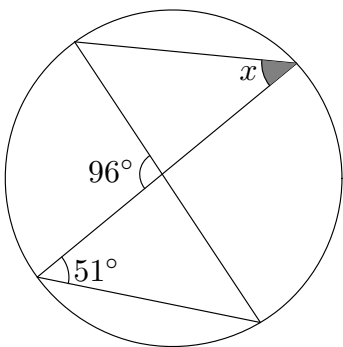
(7)



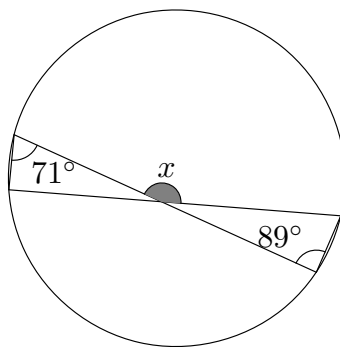
(8)



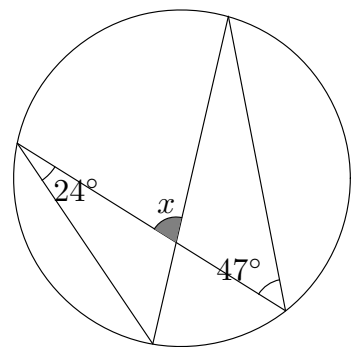
(9)



(10)



(11)

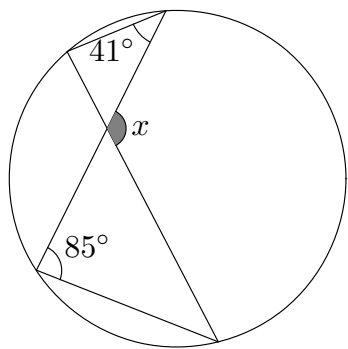


(12)

円周角 02

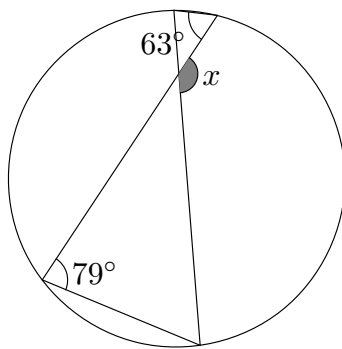
名前 () 得点 (/12)

次の角 $\angle x$ の大きさを求めなさい。



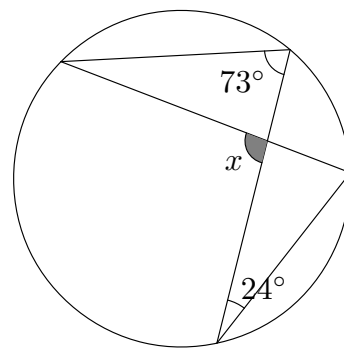
(1)

$x = 126^\circ$



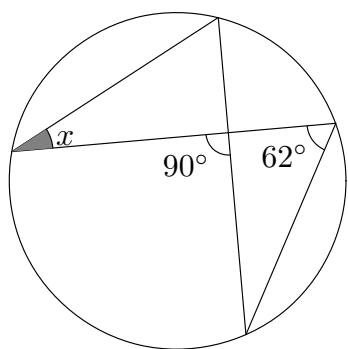
(2)

$x = 142^\circ$



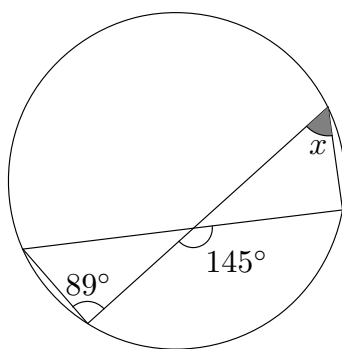
(3)

$x = 97^\circ$



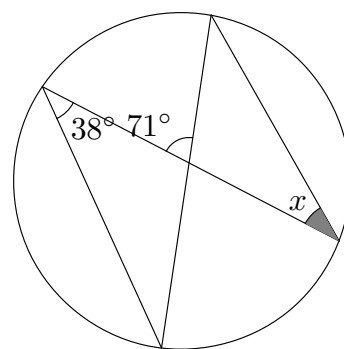
(4)

$x = 28^\circ$



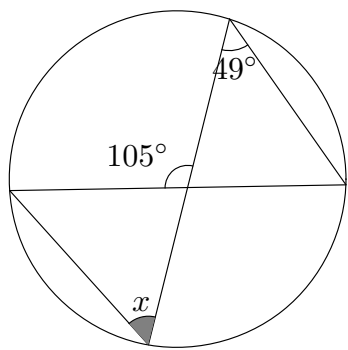
(5)

$x = 56^\circ$



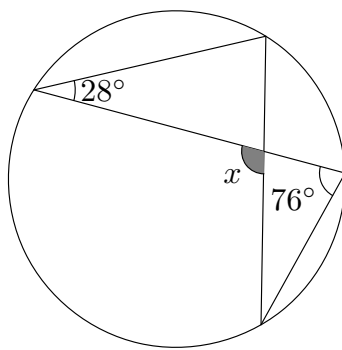
(6)

$x = 33^\circ$



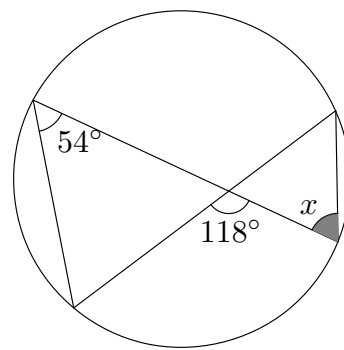
(7)

$x = 56^\circ$



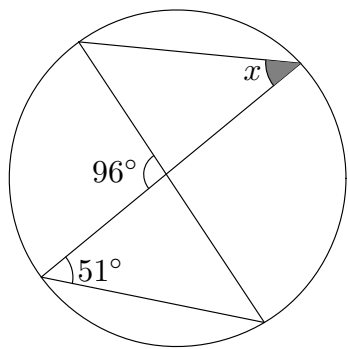
(8)

$x = 104^\circ$



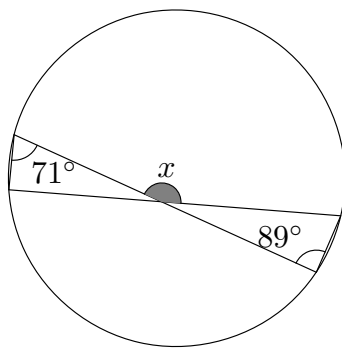
(9)

$x = 64^\circ$



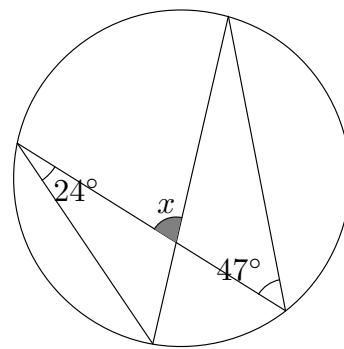
(10)

$x = 45^\circ$



(11)

$x = 160^\circ$



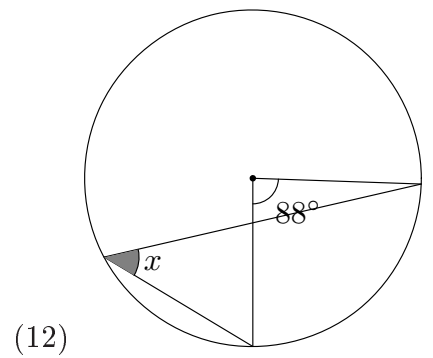
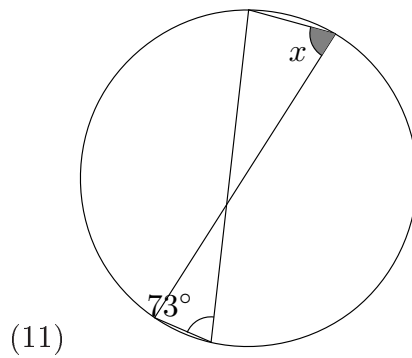
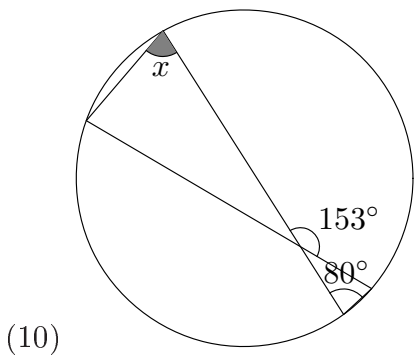
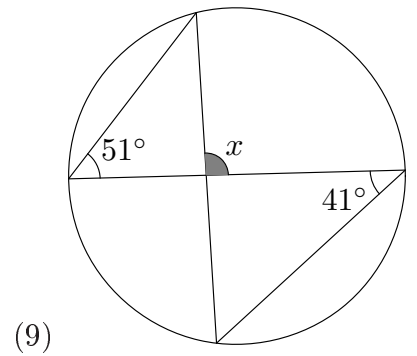
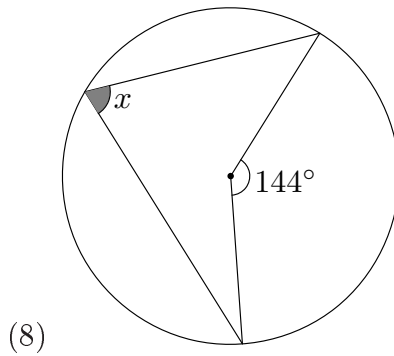
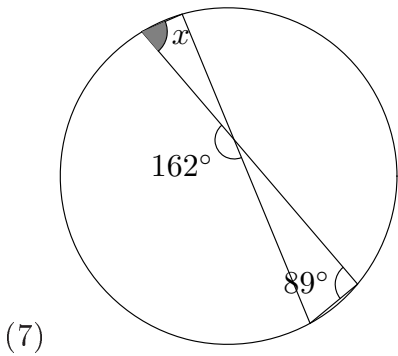
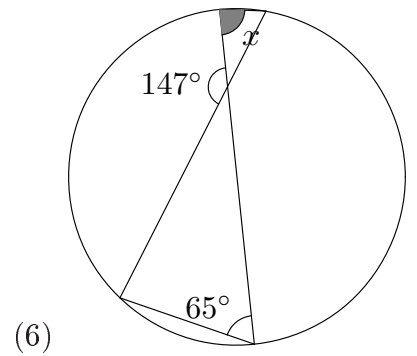
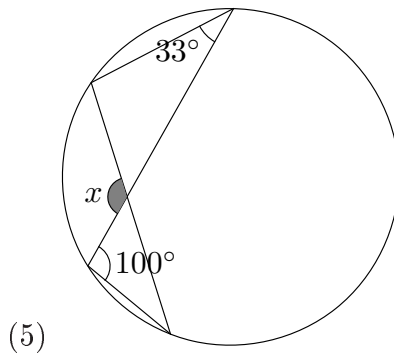
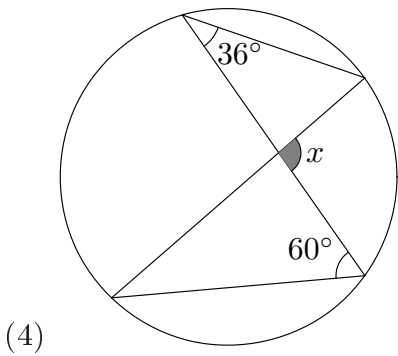
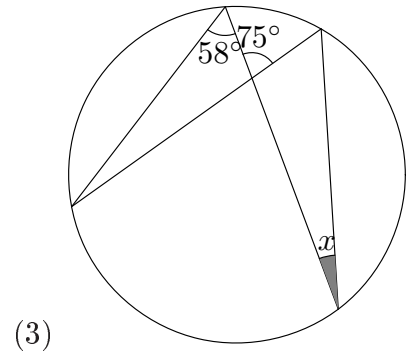
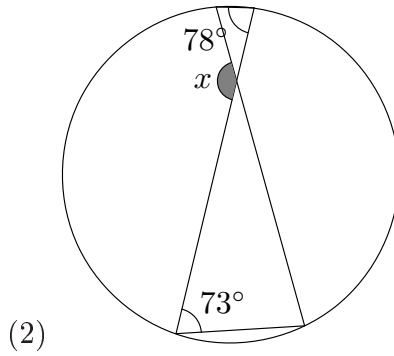
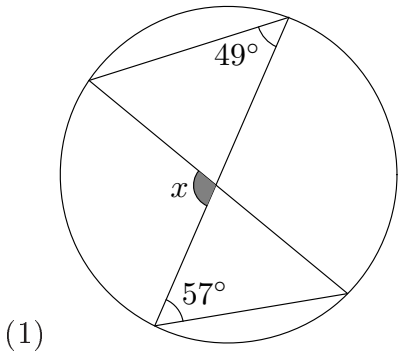
(12)

$x = 71^\circ$

円周角 03

名前 () 得点 (/12)

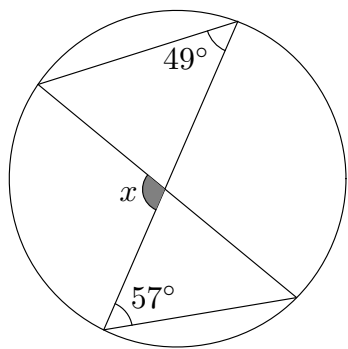
次の角 $\angle x$ の大きさを求めなさい。



円周角 03

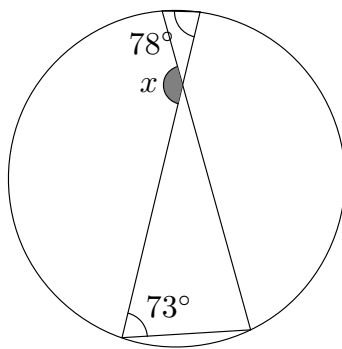
名前 () 得点 (/12)

次の角 $\angle x$ の大きさを求めなさい。



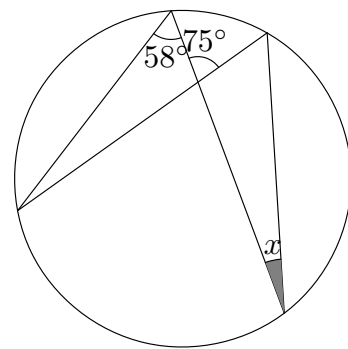
(1)

$x = 106^\circ$



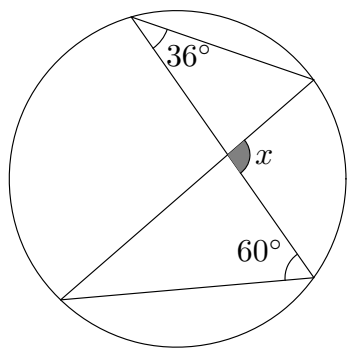
(2)

$x = 151^\circ$



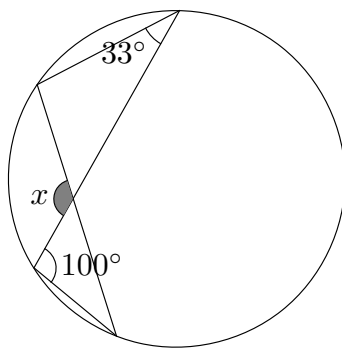
(3)

$x = 17^\circ$



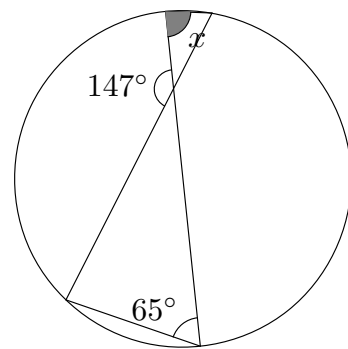
(4)

$x = 96^\circ$



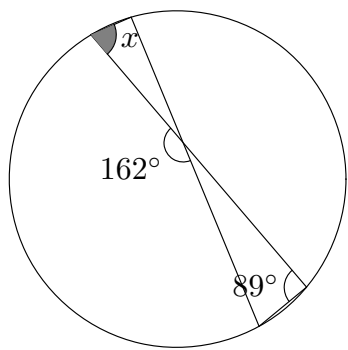
(5)

$x = 133^\circ$



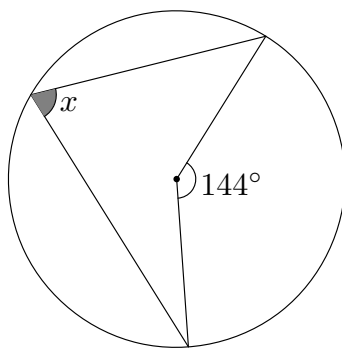
(6)

$x = 82^\circ$



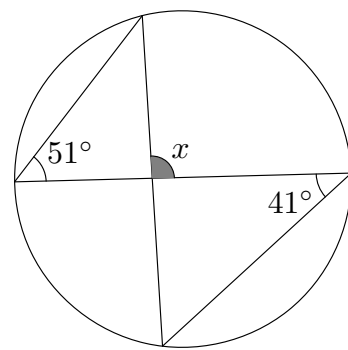
(7)

$x = 73^\circ$



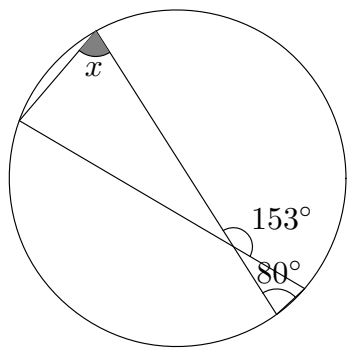
(8)

$x = 72^\circ$



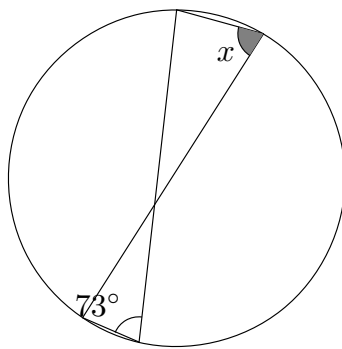
(9)

$x = 92^\circ$



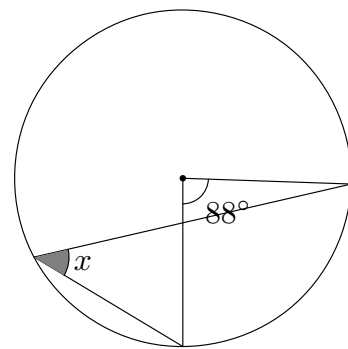
(10)

$x = 73^\circ$



(11)

$x = 73^\circ$



(12)

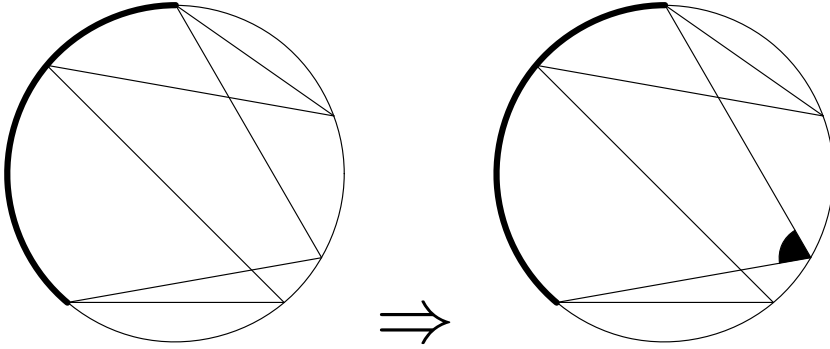
$x = 44^\circ$

円周角 04

名前 () 得点 (/12)

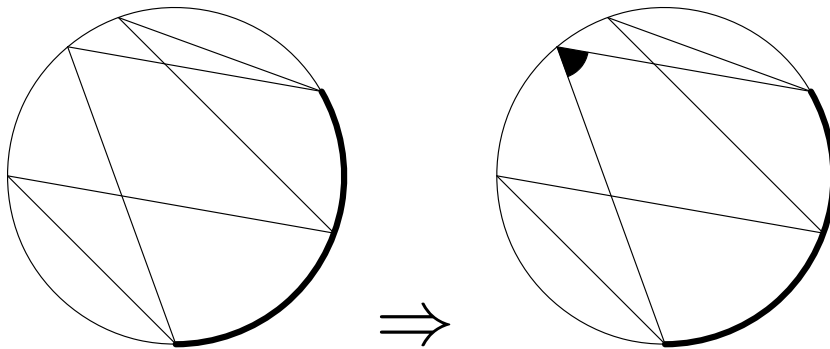
以下の太い円弧に対応する円周角を、例にならって塗りつぶして示せ。

(1)



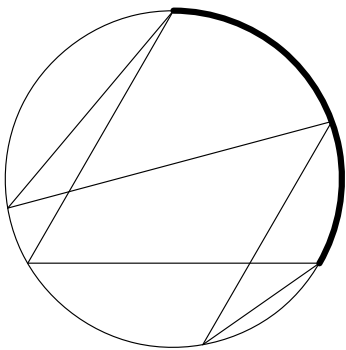
(例)

(2)

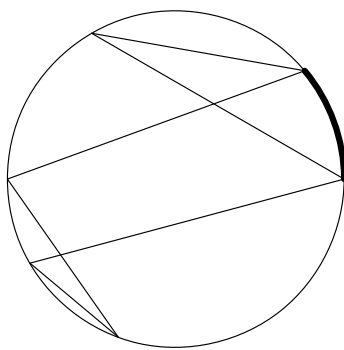


(例)

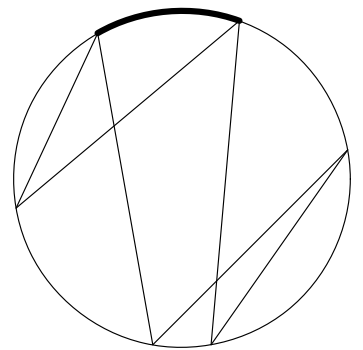
(3)



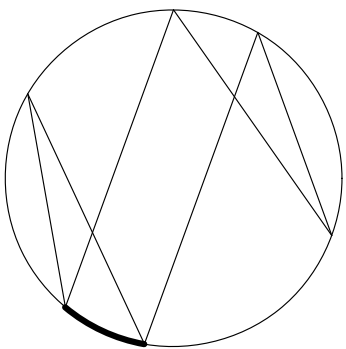
(4)



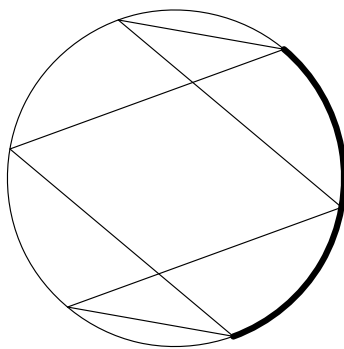
(5)



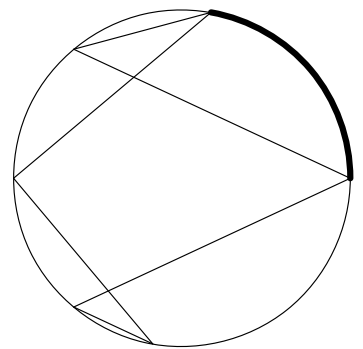
(6)



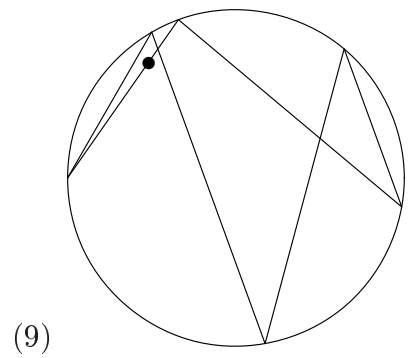
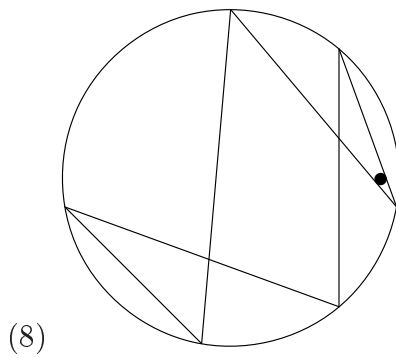
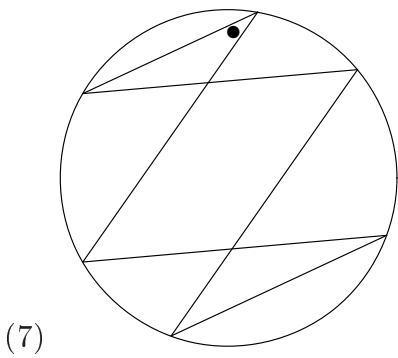
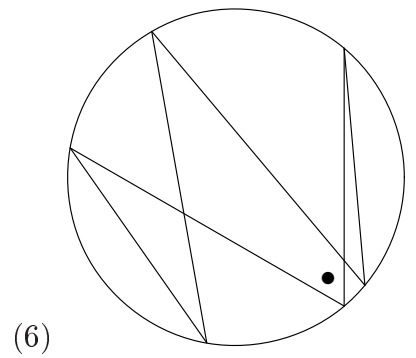
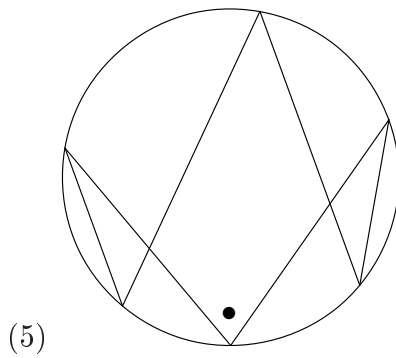
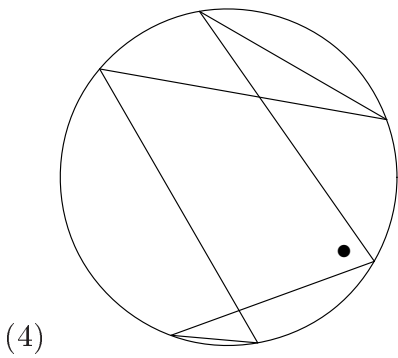
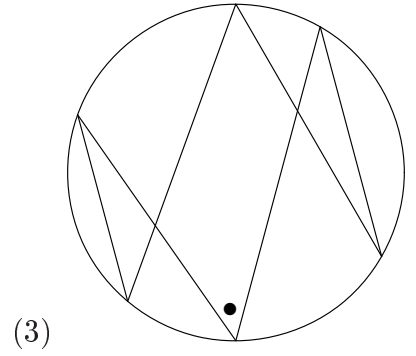
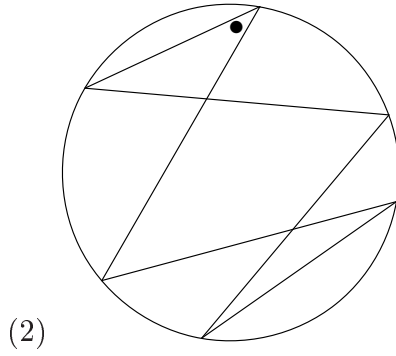
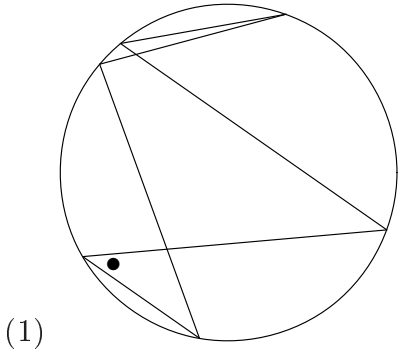
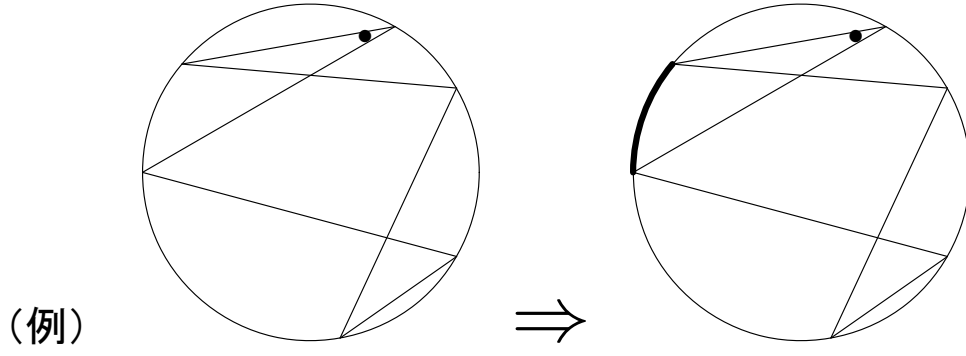
(7)



(8)



以下の角●に対応する円周を、例にならって太線で示せ。

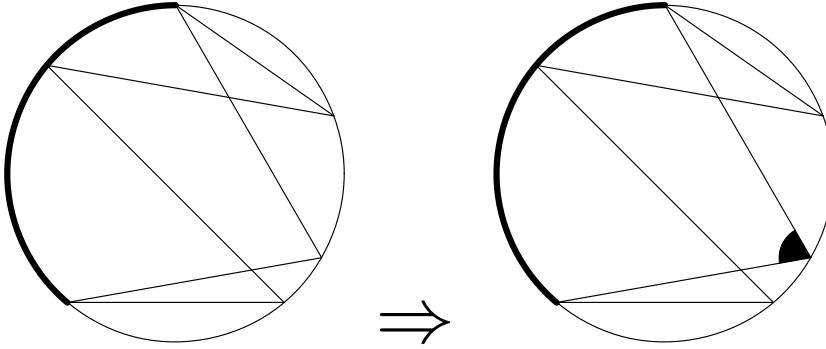


円周角 04

名前 () 得点 (/12)

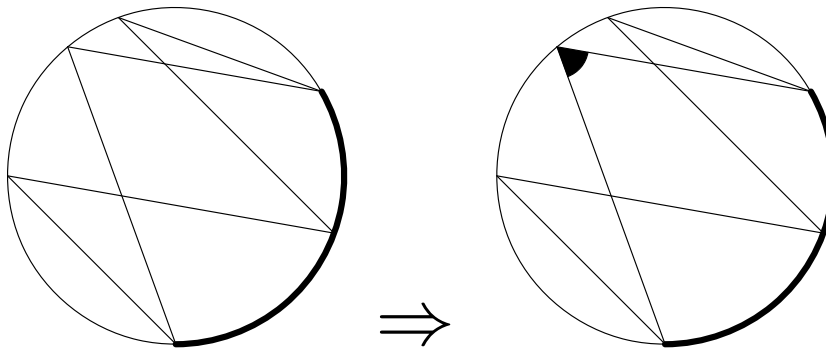
以下の太い円弧に対応する円周角を、例にならって塗りつぶして示せ。

(1)



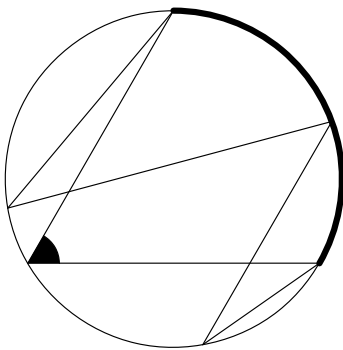
(例)

(2)

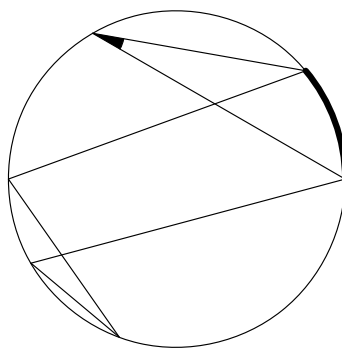


(例)

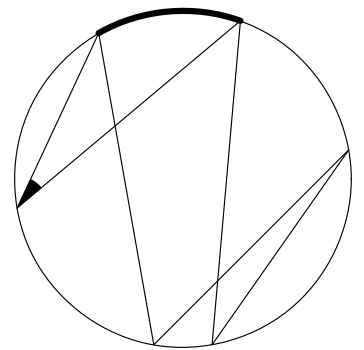
(3)



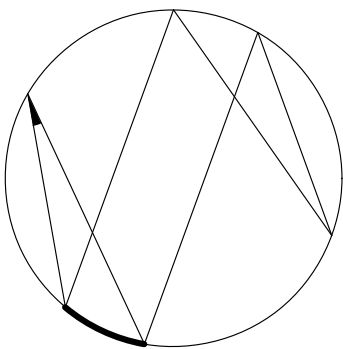
(4)



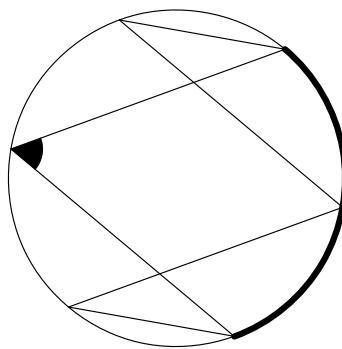
(5)



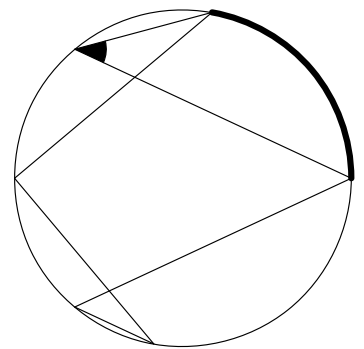
(6)



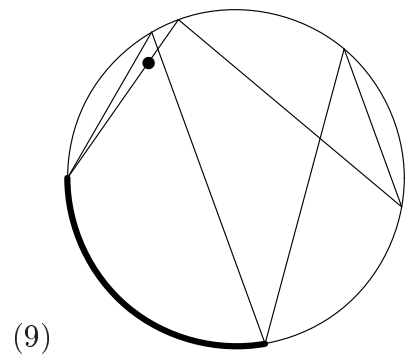
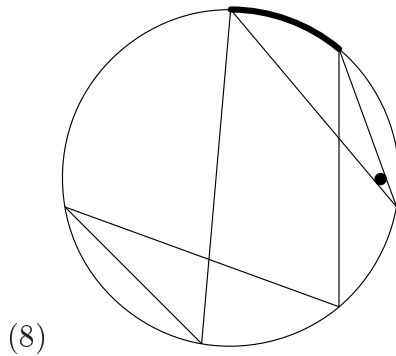
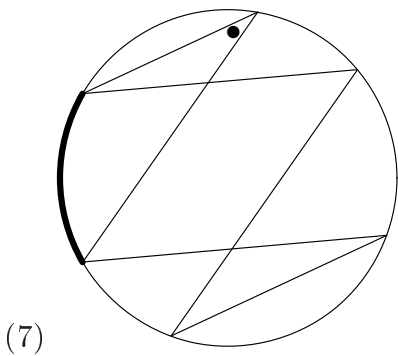
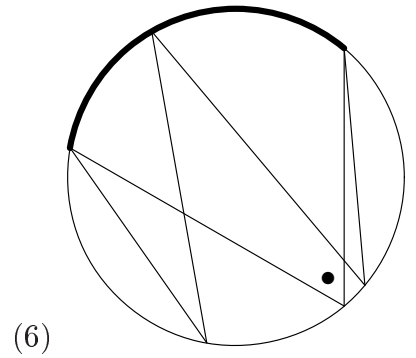
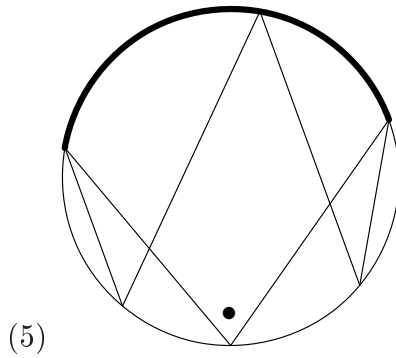
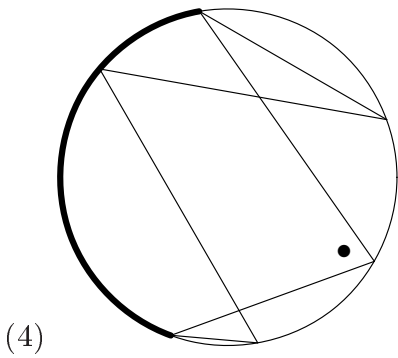
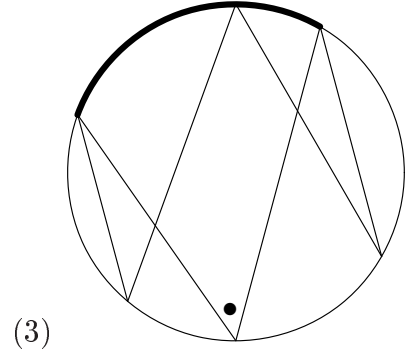
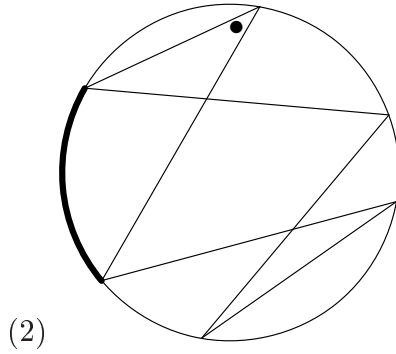
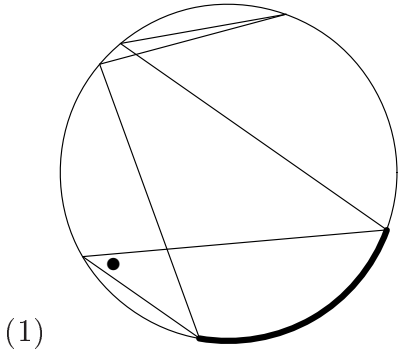
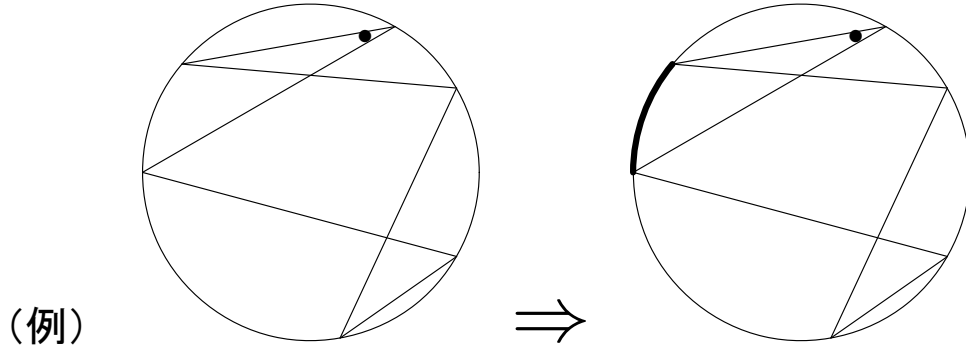
(7)



(8)



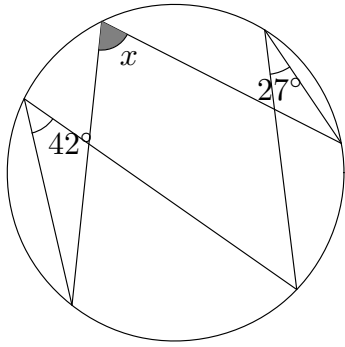
以下の角●に対応する円周を、例にならって太線で示せ。



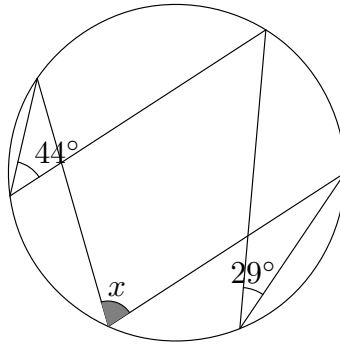
円周角 05

名前 () 得点 (/12)

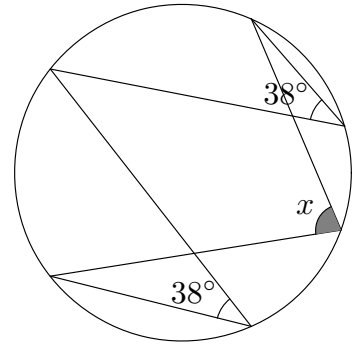
次の角 $\angle x$ の大きさを求めなさい。



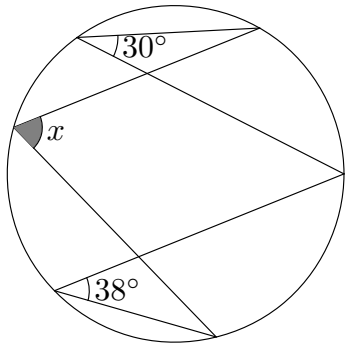
(1)



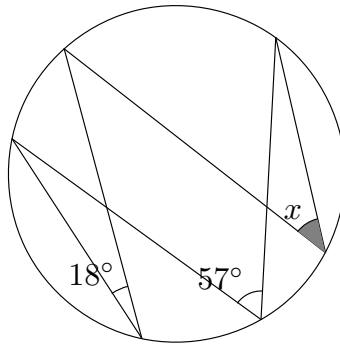
(2)



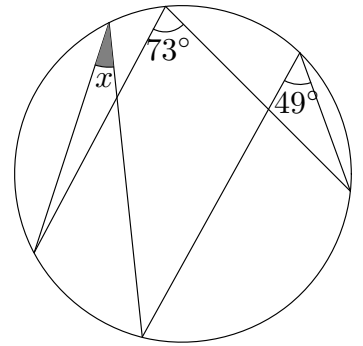
(3)



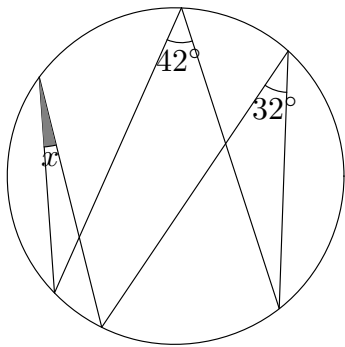
(4)



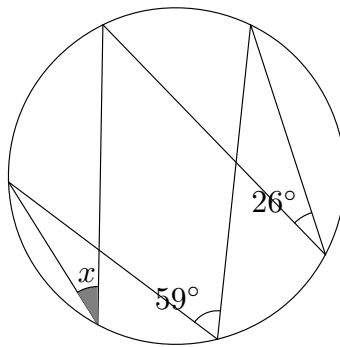
(5)



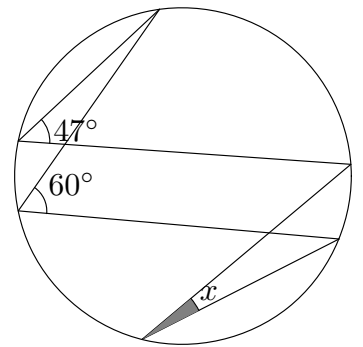
(6)



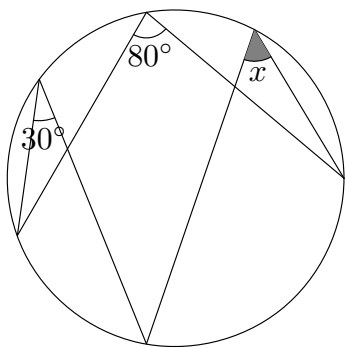
(7)



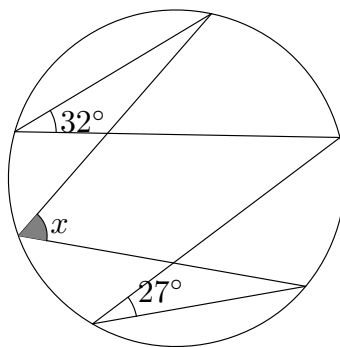
(8)



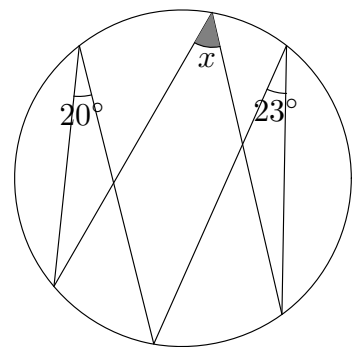
(9)



(10)



(11)

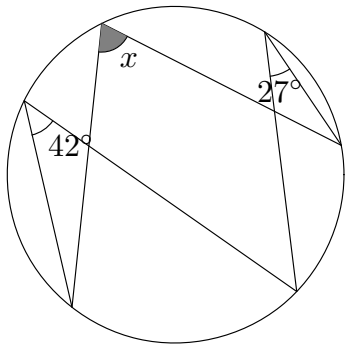


(12)

円周角 05

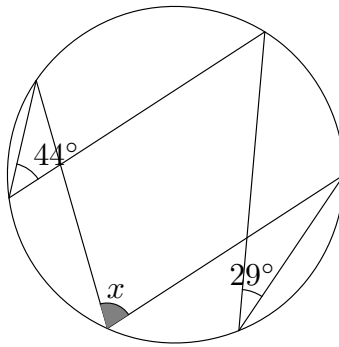
名前 () 得点 (/12)

次の角 $\angle x$ の大きさを求めなさい。



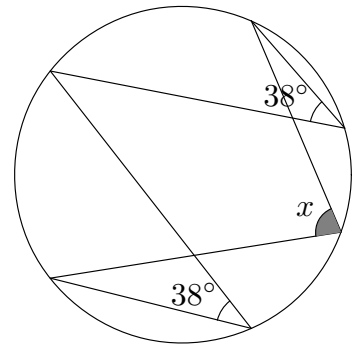
(1)

$x = 69^\circ$



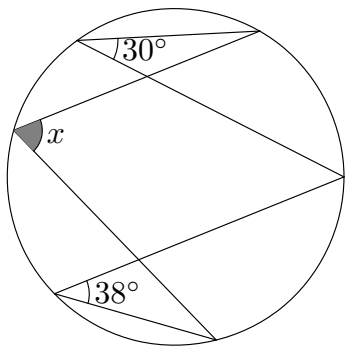
(2)

$x = 73^\circ$



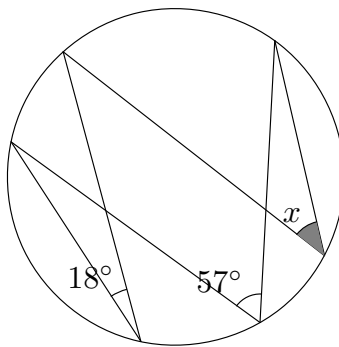
(3)

$x = 76^\circ$



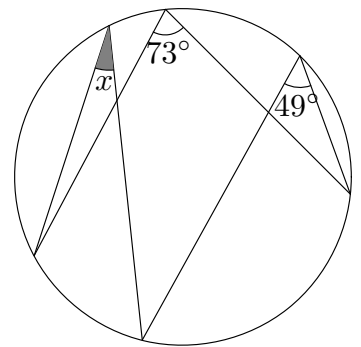
(4)

$x = 68^\circ$



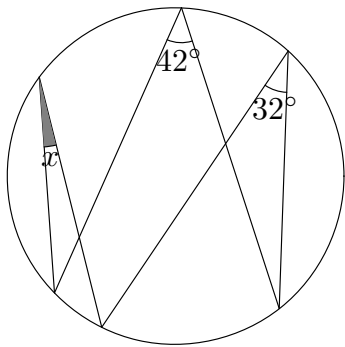
(5)

$x = 39^\circ$



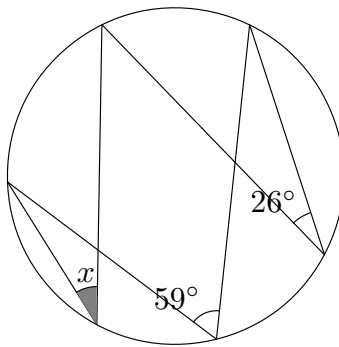
(6)

$x = 24^\circ$



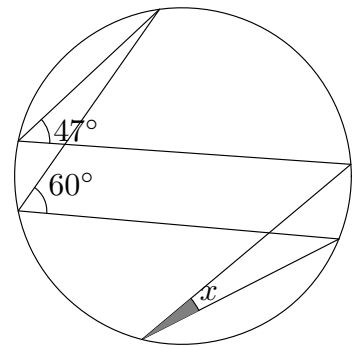
(7)

$x = 10^\circ$



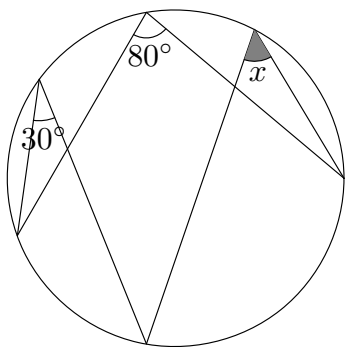
(8)

$x = 33^\circ$



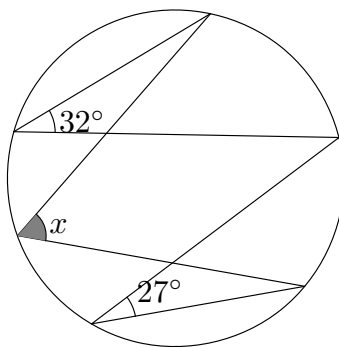
(9)

$x = 13^\circ$



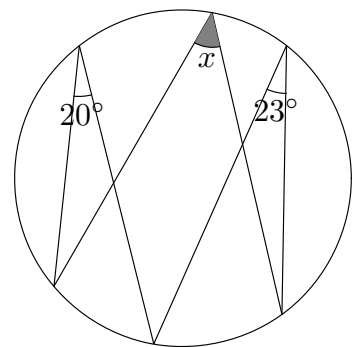
(10)

$x = 50^\circ$



(11)

$x = 59^\circ$



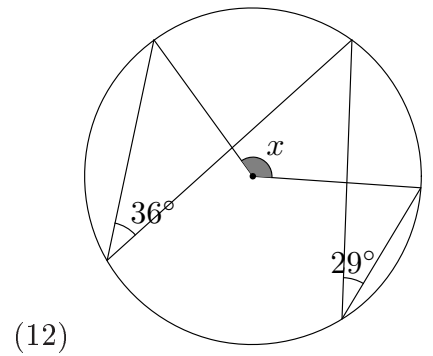
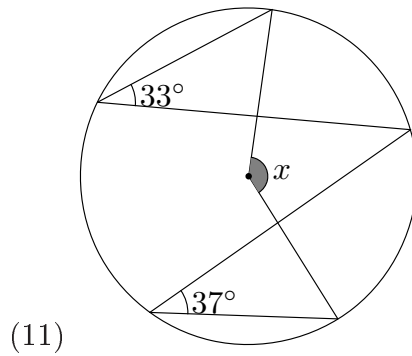
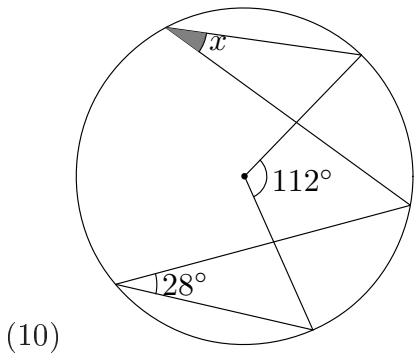
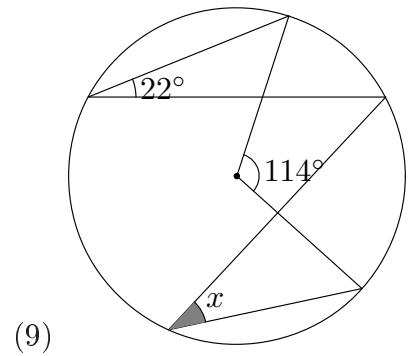
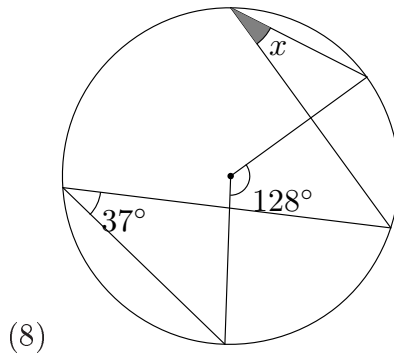
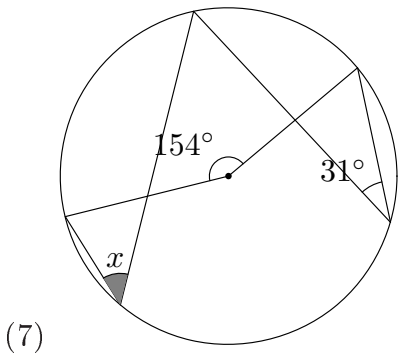
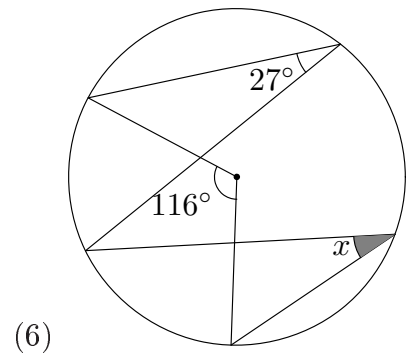
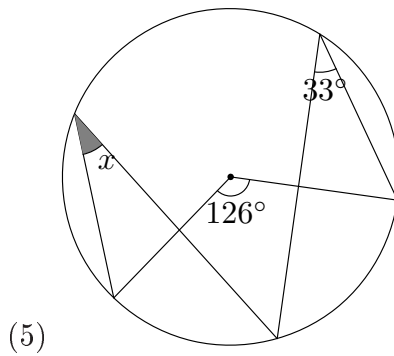
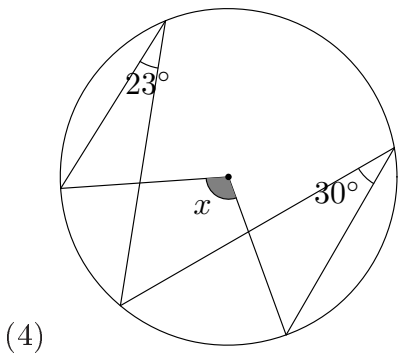
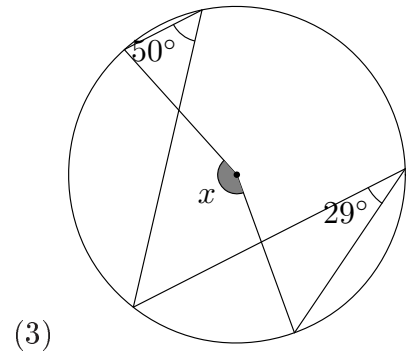
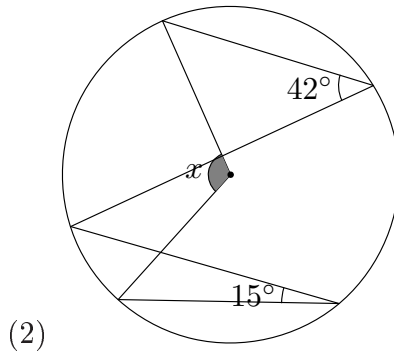
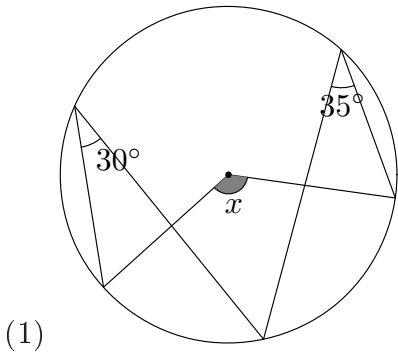
(12)

$x = 43^\circ$

円周角 06

名前 () 得点 (/12)

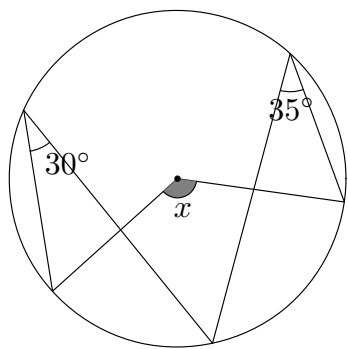
次の角 $\angle x$ の大きさを求めなさい。



円周角 06

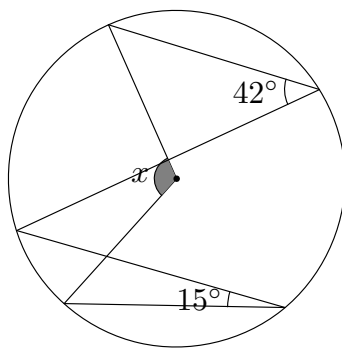
名前 () 得点 (/12)

次の角 $\angle x$ の大きさを求めなさい。



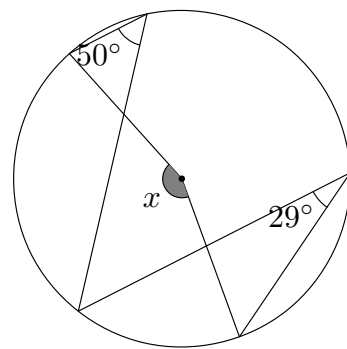
(1)

$x = 130^\circ$



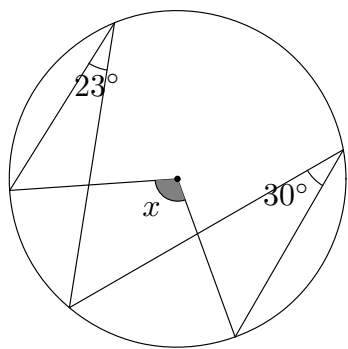
(2)

$x = 114^\circ$



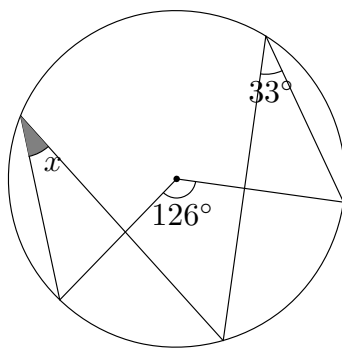
(3)

$x = 158^\circ$



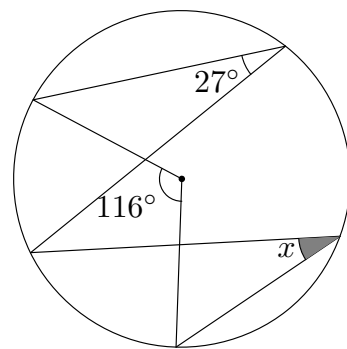
(4)

$x = 106^\circ$



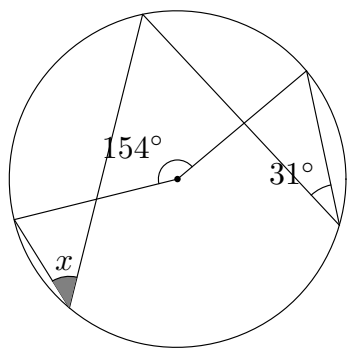
(5)

$x = 30^\circ$



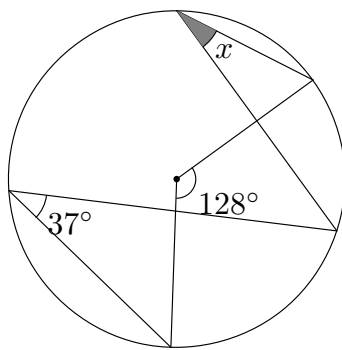
(6)

$x = 31^\circ$



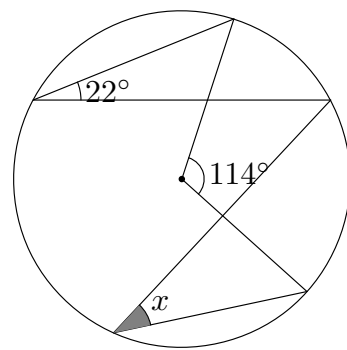
(7)

$x = 46^\circ$



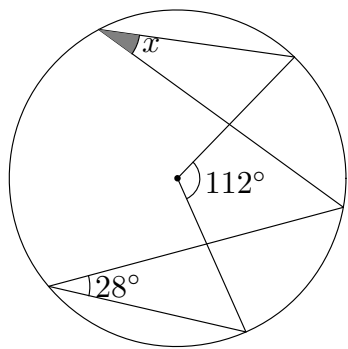
(8)

$x = 27^\circ$



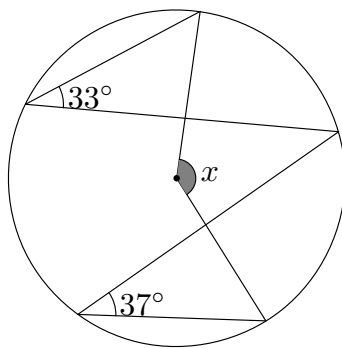
(9)

$x = 35^\circ$



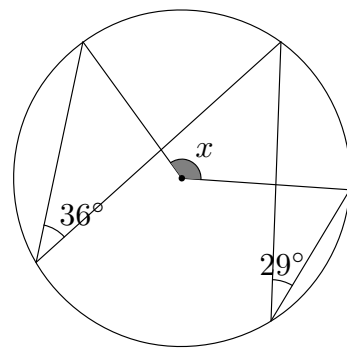
(10)

$x = 28^\circ$



(11)

$x = 140^\circ$



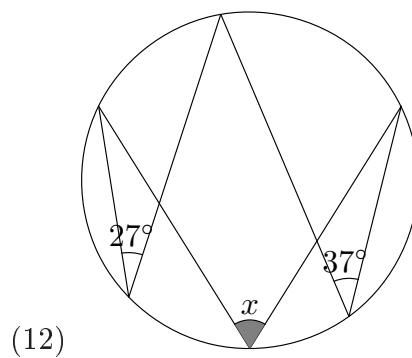
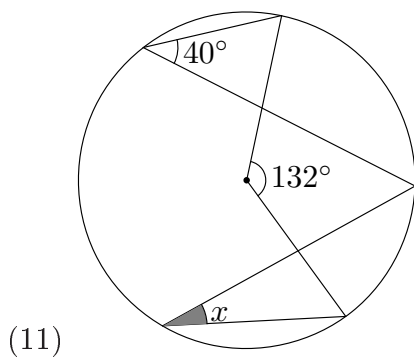
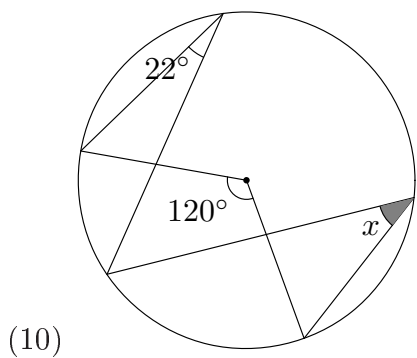
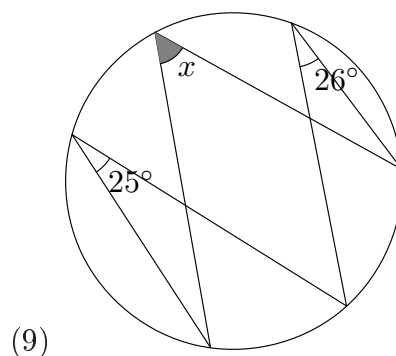
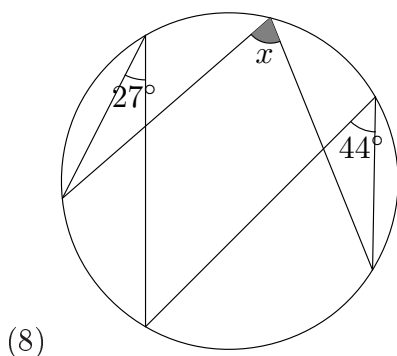
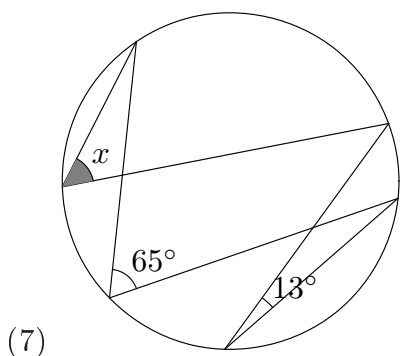
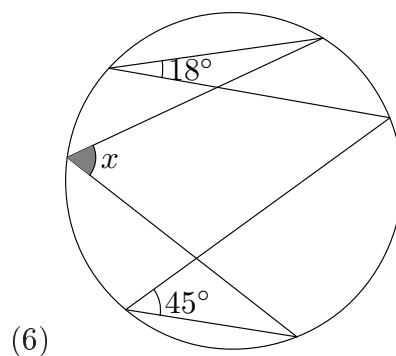
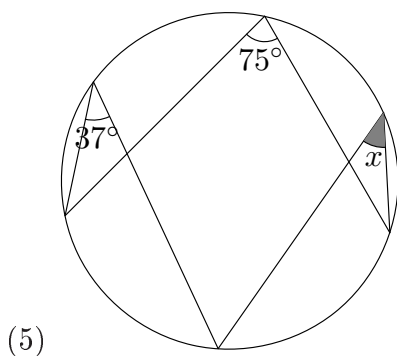
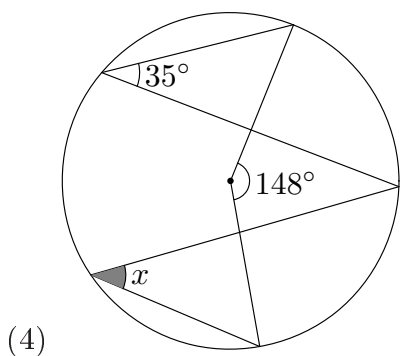
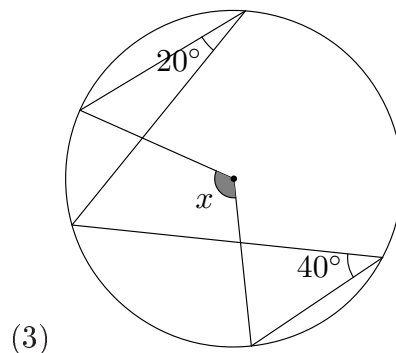
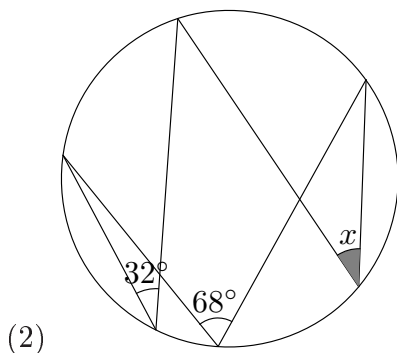
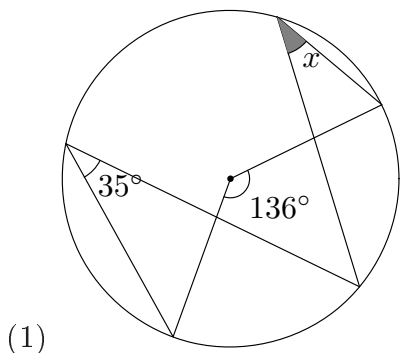
(12)

$x = 130^\circ$

円周角 07

名前 () 得点 (/12)

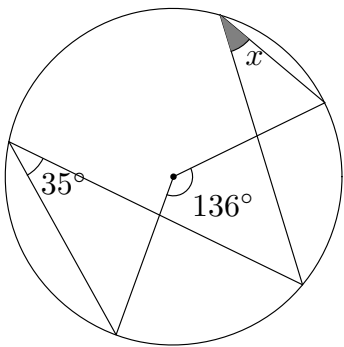
次の角 $\angle x$ の大きさを求めなさい。



円周角 07

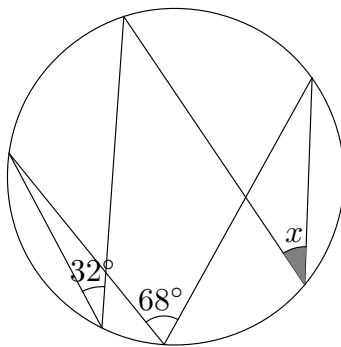
名前 () 得点 (/12)

次の角 $\angle x$ の大きさを求めなさい。



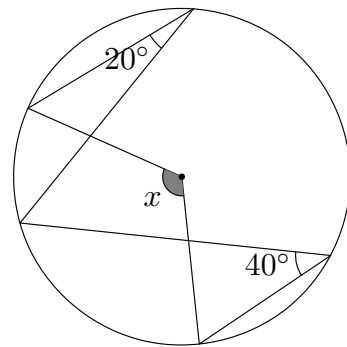
(1)

$x = 33^\circ$



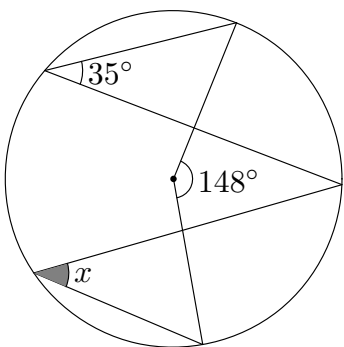
(2)

$x = 36^\circ$



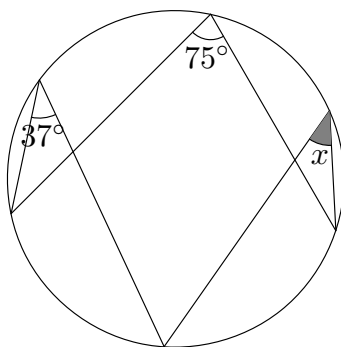
(3)

$x = 120^\circ$



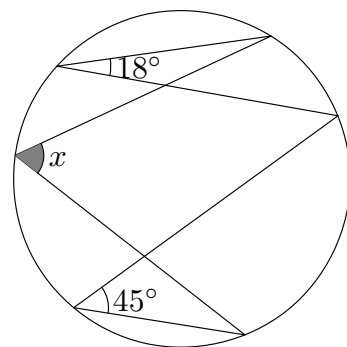
(4)

$x = 39^\circ$



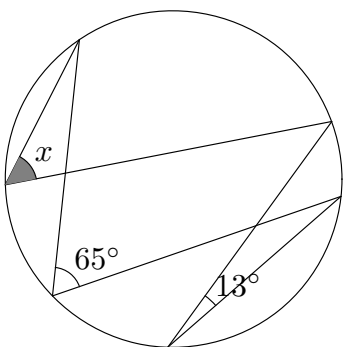
(5)

$x = 38^\circ$



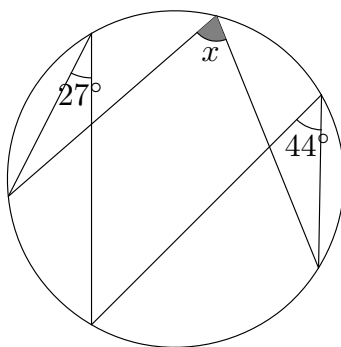
(6)

$x = 63^\circ$



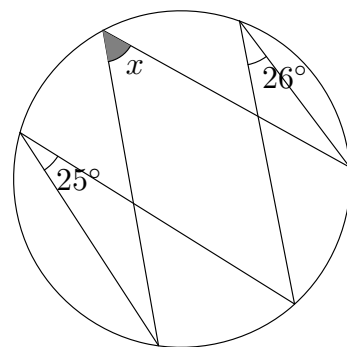
(7)

$x = 52^\circ$



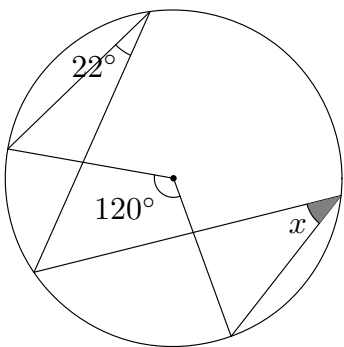
(8)

$x = 71^\circ$



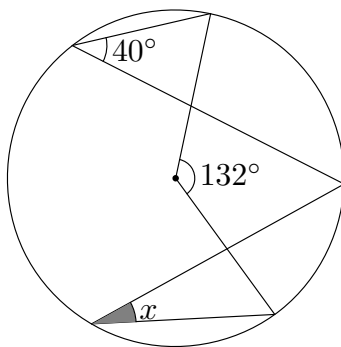
(9)

$x = 51^\circ$



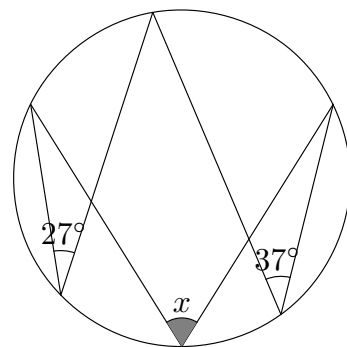
(10)

$x = 38^\circ$



(11)

$x = 26^\circ$



(12)

$x = 64^\circ$