平方完成 02-1 （　　/10）　（　　分　　秒）

次の 2 次関数を平方完成しなさい。

(1) $y = x^2 + 3x + 4$

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

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

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

(5) $y = x^2 - 3x - 1$

(6) $y = x^2 + 2x + 1$

(7) $y = x^2 + 3x + 2$

(8) $y = x^2 - 2x - 2$

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

(10) $y = x^2 - 4x + 3$

平方完成 02-1 （　　/10）　（　　分　　秒）

次の 2 次関数を平方完成しなさい。

(1) $y = x^2 + 3x + 4$

$$\boldsymbol{y = \left(x + \frac{3}{2}\right)^2 + \frac{7}{4}}$$

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

$$\boldsymbol{y = (x - 2)^2 - 8}$$

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

$$\boldsymbol{y = \left(x + \frac{3}{2}\right)^2 + \frac{3}{4}}$$

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

$$\boldsymbol{y = \left(x - \frac{1}{2}\right)^2 + \frac{3}{4}}$$

(5) $y = x^2 - 3x - 1$

$$\boldsymbol{y = \left(x - \frac{3}{2}\right)^2 - \frac{13}{4}}$$

(6) $y = x^2 + 2x + 1$

$$\boldsymbol{y = (x + 1)^2}$$

(7) $y = x^2 + 3x + 2$

$$\boldsymbol{y = \left(x + \frac{3}{2}\right)^2 - \frac{1}{4}}$$

(8) $y = x^2 - 2x - 2$

$$\boldsymbol{y = (x - 1)^2 - 3}$$

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

$$\boldsymbol{y = (x - 1)^2}$$

(10) $y = x^2 - 4x + 3$

$$\boldsymbol{y = (x - 2)^2 - 1}$$

平方完成 02-2 （　　/10）　（　　分　　秒）

次の 2 次関数を平方完成しなさい。

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

(2) $y = x^2 + x + 2$

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

(4) $y = x^2 - 5x - 5$

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

(6) $y = x^2 + 3x - 1$

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

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

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

(10) $y = x^2 + 3x + 3$

平方完成 02-2 (　　/10)　　(　　分　　秒)

次の 2 次関数を平方完成しなさい。

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

$$\boldsymbol{y = (x-1)^2 - 1}$$

(2) $y = x^2 + x + 2$

$$\boldsymbol{y = \left(x + \frac{1}{2}\right)^2 + \frac{7}{4}}$$

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

$$\boldsymbol{y = \left(x + \frac{5}{2}\right)^2 - \frac{33}{4}}$$

(4) $y = x^2 - 5x - 5$

$$\boldsymbol{y = \left(x - \frac{5}{2}\right)^2 - \frac{45}{4}}$$

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

$$\boldsymbol{y = (x-2)^2 + 1}$$

(6) $y = x^2 + 3x - 1$

$$\boldsymbol{y = \left(x + \frac{3}{2}\right)^2 - \frac{13}{4}}$$

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

$$\boldsymbol{y = (x+2)^2 - 6}$$

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

$$\boldsymbol{y = \left(x + \frac{1}{2}\right)^2 - \frac{5}{4}}$$

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

$$\boldsymbol{y = \left(x + \frac{3}{2}\right)^2 - \frac{21}{4}}$$

(10) $y = x^2 + 3x + 3$

$$\boldsymbol{y = \left(x + \frac{3}{2}\right)^2 + \frac{3}{4}}$$

平方完成 02-3 （　　/10）　（　　分　　秒）

次の 2 次関数を平方完成しなさい。

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

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

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

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

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

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

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

(8) $y = x^2 + 5x + 4$

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

(10) $y = x^2 - x + 4$

平方完成 02-3 (　　/10)　　(　　分　　秒)

次の 2 次関数を平方完成しなさい。

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

$$\boldsymbol{y = (x+1)^2 - 6}$$

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

$$\boldsymbol{y = \left(x - \frac{5}{2}\right)^2 - \frac{9}{4}}$$

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

$$\boldsymbol{y = \left(x - \frac{5}{2}\right)^2 - \frac{33}{4}}$$

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

$$\boldsymbol{y = (x+2)^2 - 7}$$

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

$$\boldsymbol{y = \left(x + \frac{3}{2}\right)^2 + \frac{11}{4}}$$

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

$$\boldsymbol{y = \left(x - \frac{5}{2}\right)^2 - \frac{25}{4}}$$

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

$$\boldsymbol{y = \left(x + \frac{1}{2}\right)^2 + \frac{15}{4}}$$

(8) $y = x^2 + 5x + 4$

$$\boldsymbol{y = \left(x + \frac{5}{2}\right)^2 - \frac{9}{4}}$$

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

$$\boldsymbol{y = (x-1)^2}$$

(10) $y = x^2 - x + 4$

$$\boldsymbol{y = \left(x - \frac{1}{2}\right)^2 + \frac{15}{4}}$$

平方完成 02-4 (　　/10)　　(　　分　　秒)

次の 2 次関数を平方完成しなさい。

(1) $y = x^2 - 3x + 4$

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

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

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

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

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

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

(8) $y = x^2 - x - 3$

(9) $y = x^2 - 5x + 3$

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

平方完成 02-4 (　　/10)　　(　　分　　秒)

次の 2 次関数を平方完成しなさい。

(1) $y = x^2 - 3x + 4$

$$\boldsymbol{y = \left(x - \frac{3}{2}\right)^2 + \frac{7}{4}}$$

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

$$\boldsymbol{y = \left(x - \frac{3}{2}\right)^2 - \frac{9}{4}}$$

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

$$\boldsymbol{y = \left(x + \frac{1}{2}\right)^2 + \frac{19}{4}}$$

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

$$\boldsymbol{y = (x - 1)^2 + 3}$$

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

$$\boldsymbol{y = \left(x + \frac{1}{2}\right)^2 + \frac{3}{4}}$$

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

$$\boldsymbol{y = \left(x + \frac{3}{2}\right)^2 - \frac{21}{4}}$$

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

$$\boldsymbol{y = \left(x - \frac{1}{2}\right)^2 + \frac{7}{4}}$$

(8) $y = x^2 - x - 3$

$$\boldsymbol{y = \left(x - \frac{1}{2}\right)^2 - \frac{13}{4}}$$

(9) $y = x^2 - 5x + 3$

$$\boldsymbol{y = \left(x - \frac{5}{2}\right)^2 - \frac{13}{4}}$$

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

$$\boldsymbol{y = (x + 1)^2}$$

平方完成 02-5 (　　/10)　(　　分　　秒)

次の 2 次関数を平方完成しなさい。

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

(2) $y = x^2 - 5x + 5$

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

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

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

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

(7) $y = x^2 + 5x + 4$

(8) $y = x^2 - 3x + 1$

(9) $y = x^2 - 2x - 4$

(10) $y = x^2 - 5x$

平方完成 02-5 (　　/10)　　(　　分　　秒)

次の 2 次関数を平方完成しなさい。

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

$$\boldsymbol{y = \left(x - \frac{1}{2}\right)^2 - \frac{9}{4}}$$

(2) $y = x^2 - 5x + 5$

$$\boldsymbol{y = \left(x - \frac{5}{2}\right)^2 - \frac{5}{4}}$$

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

$$\boldsymbol{y = \left(x + \frac{5}{2}\right)^2 - \frac{13}{4}}$$

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

$$\boldsymbol{y = (x + 1)^2 + 4}$$

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

$$\boldsymbol{y = (x + 2)^2 - 4}$$

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

$$\boldsymbol{y = \left(x + \frac{3}{2}\right)^2 - \frac{29}{4}}$$

(7) $y = x^2 + 5x + 4$

$$\boldsymbol{y = \left(x + \frac{5}{2}\right)^2 - \frac{9}{4}}$$

(8) $y = x^2 - 3x + 1$

$$\boldsymbol{y = \left(x - \frac{3}{2}\right)^2 - \frac{5}{4}}$$

(9) $y = x^2 - 2x - 4$

$$\boldsymbol{y = (x - 1)^2 - 5}$$

(10) $y = x^2 - 5x$

$$\boldsymbol{y = \left(x - \frac{5}{2}\right)^2 - \frac{25}{4}}$$

平方完成 02-6 （　　/10）　（　　分　　秒）

次の 2 次関数を平方完成しなさい。

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

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

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

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

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

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

(7) $y = x^2 + 5x - 5$

(8) $y = x^2 - 2x + 3$

(9) $y = x^2 - 3x + 5$

(10) $y = x^2 - 5x - 1$

平方完成 02-6 (　　/10)　　(　　分　　秒)

次の 2 次関数を平方完成しなさい。

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

$$\boldsymbol{y = \left(x + \frac{5}{2}\right)^2 - \frac{17}{4}}$$

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

$$\boldsymbol{y = \left(x + \frac{1}{2}\right)^2 - \frac{9}{4}}$$

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

$$\boldsymbol{y = \left(x - \frac{1}{2}\right)^2 - \frac{1}{4}}$$

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

$$\boldsymbol{y = \left(x - \frac{3}{2}\right)^2 + \frac{7}{4}}$$

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

$$\boldsymbol{y = (x + 1)^2}$$

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

$$\boldsymbol{y = \left(x + \frac{3}{2}\right)^2 - \frac{17}{4}}$$

(7) $y = x^2 + 5x - 5$

$$\boldsymbol{y = \left(x + \frac{5}{2}\right)^2 - \frac{45}{4}}$$

(8) $y = x^2 - 2x + 3$

$$\boldsymbol{y = (x - 1)^2 + 2}$$

(9) $y = x^2 - 3x + 5$

$$\boldsymbol{y = \left(x - \frac{3}{2}\right)^2 + \frac{11}{4}}$$

(10) $y = x^2 - 5x - 1$

$$\boldsymbol{y = \left(x - \frac{5}{2}\right)^2 - \frac{29}{4}}$$

平方完成 02-7 (　　/10)　(　　分　　秒)

次の 2 次関数を平方完成しなさい。

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

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

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

(4) $y = x^2 + 3x$

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

(6) $y = x^2 + 4x$

(7) $y = x^2 + 2x + 2$

(8) $y = x^2 - x + 3$

(9) $y = x^2 - x - 1$

(10) $y = x^2 + 5x - 2$

平方完成 02-7 （　　/10）　（　　分　　秒）

次の 2 次関数を平方完成しなさい。

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

$$\boldsymbol{y = \left(x + \frac{5}{2}\right)^2 - \frac{17}{4}}$$

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

$$\boldsymbol{y = \left(x + \frac{1}{2}\right)^2 + \frac{19}{4}}$$

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

$$\boldsymbol{y = (x + 1)^2 + 2}$$

(4) $y = x^2 + 3x$

$$\boldsymbol{y = \left(x + \frac{3}{2}\right)^2 - \frac{9}{4}}$$

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

$$\boldsymbol{y = (x - 1)^2 - 4}$$

(6) $y = x^2 + 4x$

$$\boldsymbol{y = (x + 2)^2 - 4}$$

(7) $y = x^2 + 2x + 2$

$$\boldsymbol{y = (x + 1)^2 + 1}$$

(8) $y = x^2 - x + 3$

$$\boldsymbol{y = \left(x - \frac{1}{2}\right)^2 + \frac{11}{4}}$$

(9) $y = x^2 - x - 1$

$$\boldsymbol{y = \left(x - \frac{1}{2}\right)^2 - \frac{5}{4}}$$

(10) $y = x^2 + 5x - 2$

$$\boldsymbol{y = \left(x + \frac{5}{2}\right)^2 - \frac{33}{4}}$$

平方完成 02-8 (　　/10)　　(　　分　　秒)

次の 2 次関数を平方完成しなさい。

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

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

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

(4) $y = x^2 + 2x$

(5) $y = x^2 - x + 5$

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

(7) $y = x^2 - 5x + 3$

(8) $y = x^2 - 2x + 2$

(9) $y = x^2 - 5x + 1$

(10) $y = x^2 + 5x - 5$

平方完成 02-8 (　　/10)　　(　　分　　秒)

次の 2 次関数を平方完成しなさい。

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

$$\boldsymbol{y = (x-2)^2}$$

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

$$\boldsymbol{y = \left(x + \frac{1}{2}\right)^2 - \frac{13}{4}}$$

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

$$\boldsymbol{y = \left(x + \frac{5}{2}\right)^2 - \frac{17}{4}}$$

(4) $y = x^2 + 2x$

$$\boldsymbol{y = (x+1)^2 - 1}$$

(5) $y = x^2 - x + 5$

$$\boldsymbol{y = \left(x - \frac{1}{2}\right)^2 + \frac{19}{4}}$$

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

$$\boldsymbol{y = \left(x + \frac{1}{2}\right)^2 + \frac{11}{4}}$$

(7) $y = x^2 - 5x + 3$

$$\boldsymbol{y = \left(x - \frac{5}{2}\right)^2 - \frac{13}{4}}$$

(8) $y = x^2 - 2x + 2$

$$\boldsymbol{y = (x-1)^2 + 1}$$

(9) $y = x^2 - 5x + 1$

$$\boldsymbol{y = \left(x - \frac{5}{2}\right)^2 - \frac{21}{4}}$$

(10) $y = x^2 + 5x - 5$

$$\boldsymbol{y = \left(x + \frac{5}{2}\right)^2 - \frac{45}{4}}$$

平方完成 02-9 (　　/10)　　(　　分　　秒)

次の 2 次関数を平方完成しなさい。

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

(2) $y = x^2 - x - 5$

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

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

(5) $y = x^2 - 5x - 2$

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

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

(8) $y = x^2 + x + 2$

(9) $y = x^2 - 3x - 1$

(10) $y = x^2 + 3x - 3$

平方完成 02-9 (　　/10)　　(　　分　　秒)

次の 2 次関数を平方完成しなさい。

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

$$\boldsymbol{y = (x+1)^2 - 2}$$

(2) $y = x^2 - x - 5$

$$\boldsymbol{y = \left(x - \frac{1}{2}\right)^2 - \frac{21}{4}}$$

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

$$\boldsymbol{y = \left(x + \frac{3}{2}\right)^2 - \frac{1}{4}}$$

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

$$\boldsymbol{y = (x-2)^2 - 2}$$

(5) $y = x^2 - 5x - 2$

$$\boldsymbol{y = \left(x - \frac{5}{2}\right)^2 - \frac{33}{4}}$$

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

$$\boldsymbol{y = \left(x + \frac{3}{2}\right)^2 - \frac{17}{4}}$$

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

$$\boldsymbol{y = (x+1)^2 - 3}$$

(8) $y = x^2 + x + 2$

$$\boldsymbol{y = \left(x + \frac{1}{2}\right)^2 + \frac{7}{4}}$$

(9) $y = x^2 - 3x - 1$

$$\boldsymbol{y = \left(x - \frac{3}{2}\right)^2 - \frac{13}{4}}$$

(10) $y = x^2 + 3x - 3$

$$\boldsymbol{y = \left(x + \frac{3}{2}\right)^2 - \frac{21}{4}}$$

平方完成 02-10 (　　/10)　(　　分　　秒)

次の 2 次関数を平方完成しなさい。

(1) $y = x^2 + 3x - 4$

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

(3) $y = x^2 + 4x$

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

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

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

(7) $y = x^2 + 2x$

(8) $y = x^2 + 3x + 4$

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

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

平方完成 02-10 （　　/10）　（　　分　　秒）

次の 2 次関数を平方完成しなさい。

(1) $y = x^2 + 3x - 4$

$$\boldsymbol{y = \left(x + \frac{3}{2}\right)^2 - \frac{25}{4}}$$

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

$$\boldsymbol{y = \left(x + \frac{1}{2}\right)^2 - \frac{9}{4}}$$

(3) $y = x^2 + 4x$

$$\boldsymbol{y = (x + 2)^2 - 4}$$

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

$$\boldsymbol{y = \left(x - \frac{1}{2}\right)^2 - \frac{5}{4}}$$

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

$$\boldsymbol{y = (x + 2)^2 - 3}$$

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

$$\boldsymbol{y = \left(x + \frac{3}{2}\right)^2 - \frac{29}{4}}$$

(7) $y = x^2 + 2x$

$$\boldsymbol{y = (x + 1)^2 - 1}$$

(8) $y = x^2 + 3x + 4$

$$\boldsymbol{y = \left(x + \frac{3}{2}\right)^2 + \frac{7}{4}}$$

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

$$\boldsymbol{y = (x - 2)^2 - 1}$$

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

$$\boldsymbol{y = (x + 1)^2 + 4}$$