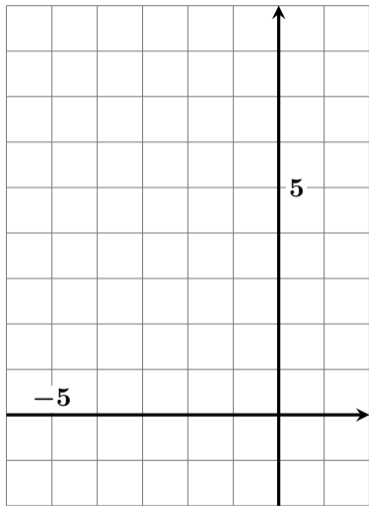
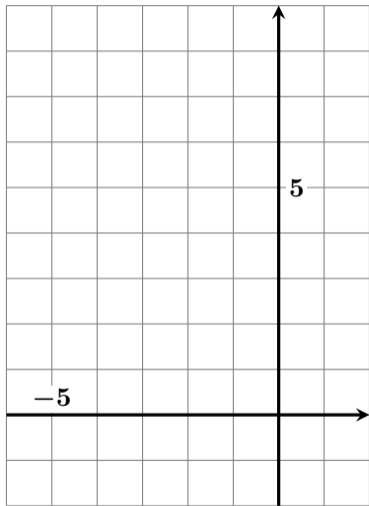


$y = (x+3)^2 - 1$ のグラフを描きなさい

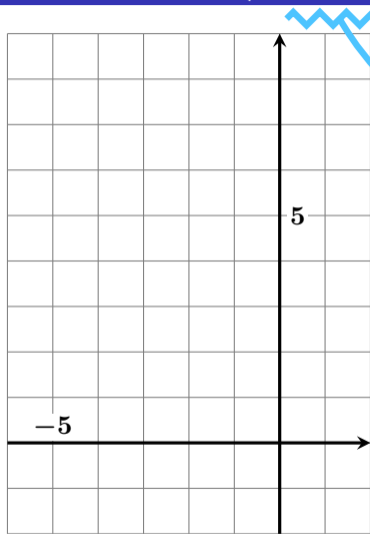


$y = (x+3)^2 - 1$ のグラフを描きなさい



$(\quad)^2 + \Delta$ の形の場合は
計算しなくても頂点分かる

$y = (x+3)^2 - 1$ のグラフを描きなさい

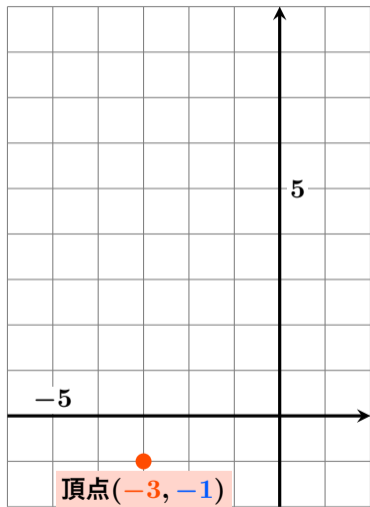


逆

そのまま

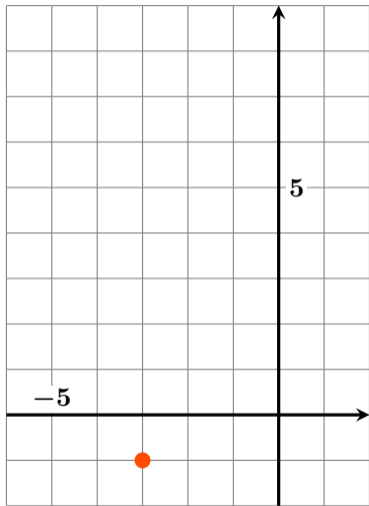
頂点 $(-3, -1)$

$y = (x+3)^2 - 1$ のグラフを描きなさい



頂点 $(-3, -1)$

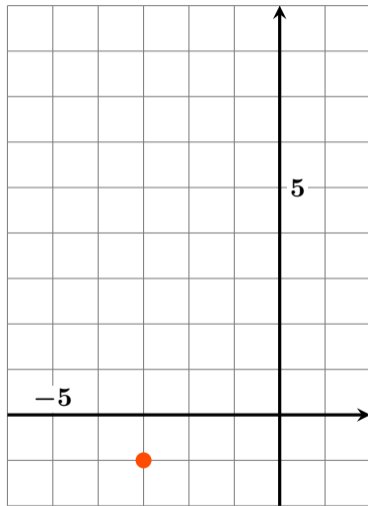
$y = (x+3)^2 - 1$ のグラフを描きなさい



$$y = (x+3)^2 - 1$$
$$= x^2 + \bullet x + \blacktriangledown \text{ なので}$$

頂点 (-3 , -1)

$y = (x+3)^2 - 1$ のグラフを描きなさい



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

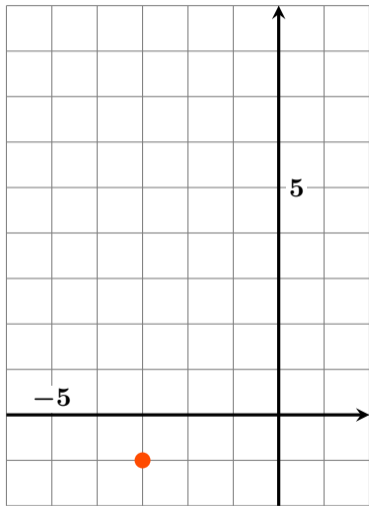
$$= x^2 + \bullet x + \blacktriangledown \text{ なので}$$

$$1 \quad 2 \quad 3 \quad \dots$$

$$1^2 \quad 2^2 \quad 3^2 \quad \dots$$

頂点 $(-3, -1)$

$y = (x+3)^2 - 1$ のグラフを描きなさい



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

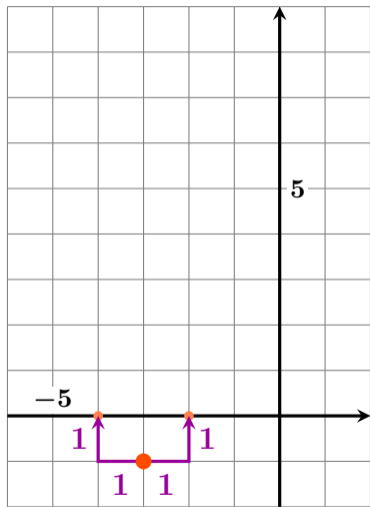
$$= x^2 + \bullet x + \blacktriangledown \text{ なので}$$

$$1 \quad 2 \quad 3 \quad \dots$$

$$1 \quad 4 \quad 9 \quad \dots$$

頂点 $(-3, -1)$

$y = (x+3)^2 - 1$ のグラフを描きなさい

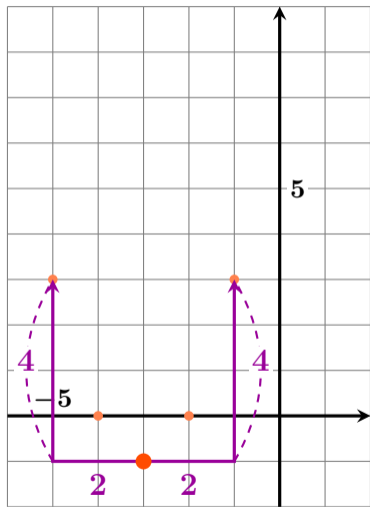


$$y = (x+3)^2 - 1$$
$$= x^2 + \bullet x + \blacktriangledown \text{ なので}$$

1	2	3
1	4	9

頂点 (-3 , -1)

$y = (x+3)^2 - 1$ のグラフを描きなさい



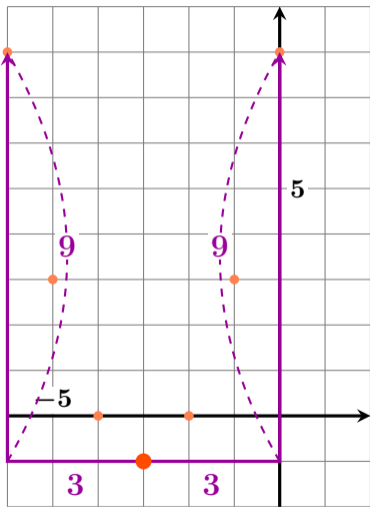
$$y = (x+3)^2 - 1$$

$$= x^2 + \bullet x + \blacktriangledown \text{ なので}$$

$$\begin{array}{cccc} 1 & \boxed{2} & 3 & \dots\dots \\ 1 & \boxed{4} & 9 & \dots\dots \end{array}$$

頂点 $(-3, -1)$

$y = (x+3)^2 - 1$ のグラフを描きなさい



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

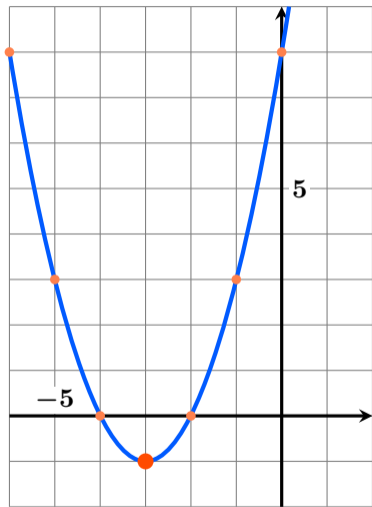
$$= x^2 + \bullet x + \blacktriangledown \text{ なので}$$

$$1 \quad 2 \quad \boxed{3} \quad \dots\dots$$

$$1 \quad 4 \quad \boxed{9} \quad \dots\dots$$

頂点 $(-3, -1)$

$y = (x+3)^2 - 1$ のグラフを描きなさい



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

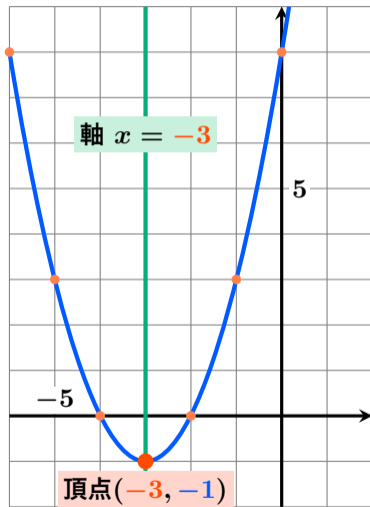
$$= x^2 + \bullet x + \blacktriangledown \text{ なので}$$

1 2 3

1 4 9

頂点 (-3 , -1)

$y = (x+3)^2 - 1$ のグラフを描きなさい



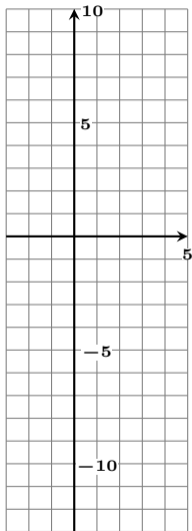
$$y = (x+3)^2 - 1$$
$$= x^2 + \bullet x + \blacktriangledown \text{ なので}$$

1 2 3

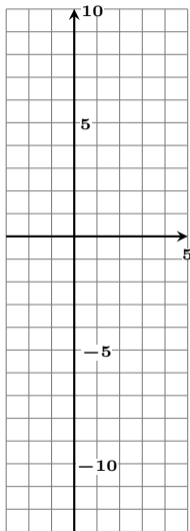
1 4 9

頂点 $(-3, -1)$

$y = -2(x-1)^2 + 8$ のグラフを描きなさい

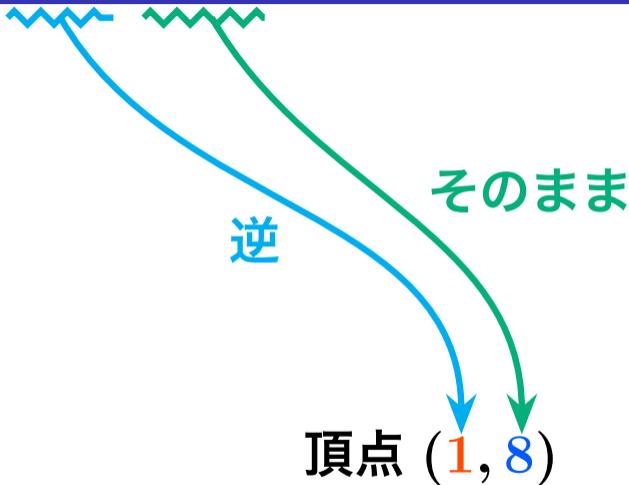
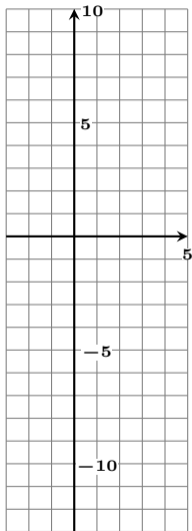


$y = -2(x-1)^2 + 8$ のグラフを描きなさい

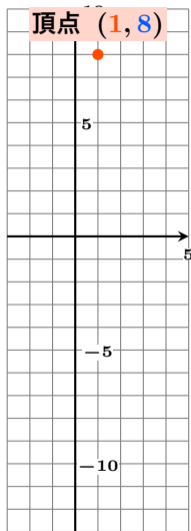


$(\quad)^2 + \Delta$ の形の場合は
計算しなくても頂点分かる

$y = -2(x-1)^2 + 8$ のグラフを描きなさい

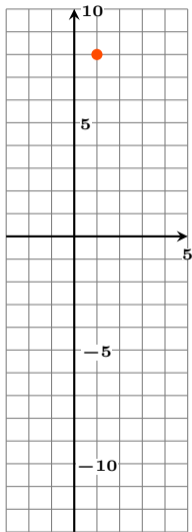


$y = -2(x-1)^2 + 8$ のグラフを描きなさい



頂点 (1, 8)

$y = -2(x-1)^2 + 8$ のグラフを描きなさい

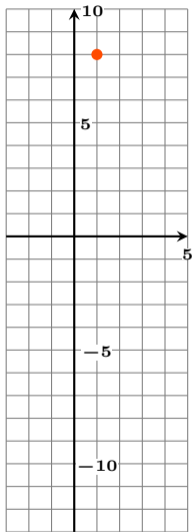


$$y = -2(x-1)^2 + 8$$

$$= -2x^2 + \bullet x + \blacktriangledown \text{ なので}$$

頂点 (1, 8)

$y = -2(x-1)^2 + 8$ のグラフを描きなさい



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

$$= -2x^2 + \bullet x + \blacktriangledown \text{ なので}$$

1

2

3

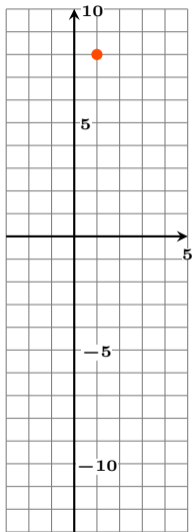
$$-2 \times 1^2$$

$$-2 \times 2^2$$

$$-2 \times 3^2$$

頂点 (1, 8)

$y = -2(x-1)^2 + 8$ のグラフを描きなさい



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

$$= -2x^2 + \bullet x + \blacktriangledown \text{ なので}$$

1

2

3

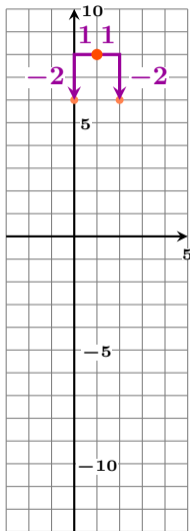
-2

-8

-18

頂点 (1, 8)

$y = -2(x-1)^2 + 8$ のグラフを描きなさい



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

$$= -2x^2 + \bullet x + \blacktriangledown \text{ なので}$$

$$\boxed{\begin{matrix} 1 \\ -2 \end{matrix}}$$

2

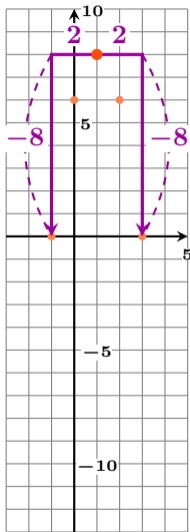
3

-8

-18

頂点 (1, 8)

$y = -2(x-1)^2 + 8$ のグラフを描きなさい



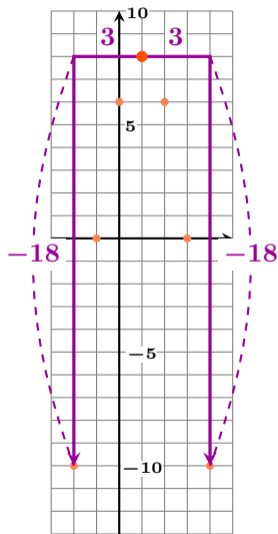
$$y = -2(x-1)^2 + 8$$

$$= -2x^2 + \bullet x + \blacktriangledown \text{ なので}$$

$$\begin{array}{ccc} 1 & \boxed{2} & 3 \\ -2 & -8 & -18 \end{array}$$

頂点 (1, 8)

$y = -2(x-1)^2 + 8$ のグラフを描きなさい



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

$$= -2x^2 + \bullet x + \blacktriangledown \text{ なので}$$

1

2

3

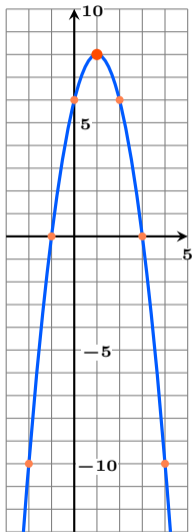
-2

-8

-18

頂点 (1, 8)

$y = -2(x-1)^2 + 8$ のグラフを描きなさい



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

$$= -2x^2 + \bullet x + \blacktriangledown \text{ なので}$$

1

2

3

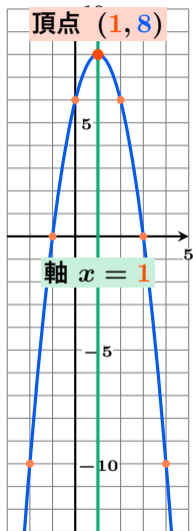
-2

-8

-18

頂点 (1, 8)

$y = -2(x-1)^2 + 8$ のグラフを描きなさい



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

$$= -2x^2 + \bullet x + \blacktriangledown \text{ なので}$$

1

2

3

-2

-8

-18

頂点 (1, 8)