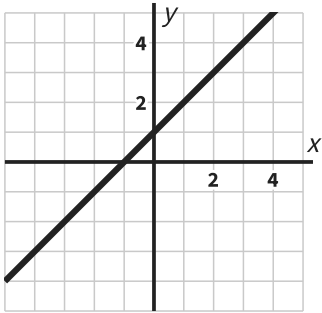


Recognising Linear and Quadratic Graphs

1

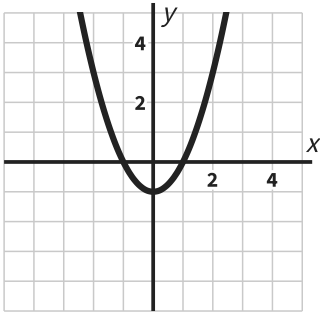
Circle one in each row.



Shape ☒ straight line ☐ U shape
Type ☒ linear ☐ quadratic

2

Circle one in each row.

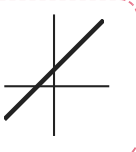
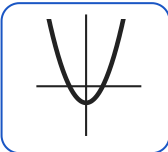


Shape ☐ straight line ☒ U shape
Type ☐ linear ☒ quadratic

3

Circle one in each row.

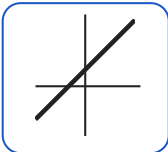
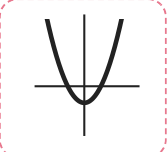
$y = x^2 + 4$

x^2 ? ☐ no ☒ yes
Type ☐ linear ☒ quadratic
Shape  

4

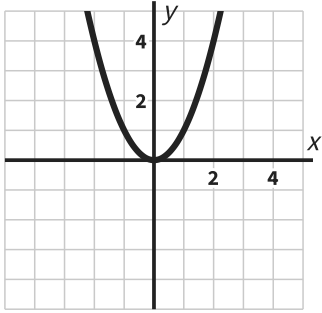
Circle one in each row.

$y = 2x + 1$

x^2 ? ☐ no ☒ yes
Type ☒ linear ☐ quadratic
Shape  

5

Circle one in each row.

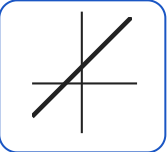


Shape ☐ straight line ☒ U shape
Type ☐ linear ☒ quadratic

6

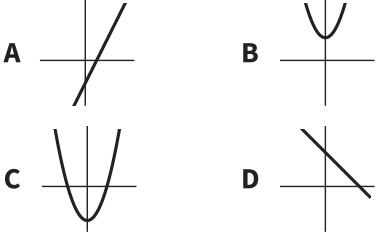
Circle one in each row.

$y = 3x$

x^2 ? ☐ no ☒ yes
Type ☒ linear ☐ quadratic
Shape  

7

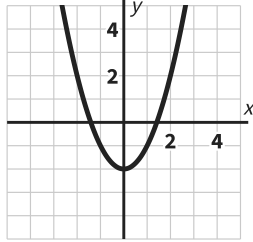
Write each letter in the table.



Linear	Quadratic
☒ A	☒ B
☒ D	☒ C

8

Circle one in each row.



Shape ☐ straight line ☒ U shape
Type ☐ linear ☒ quadratic
Equation ☐ $y = x - 2$ ☒ $y = x^2 - 2$

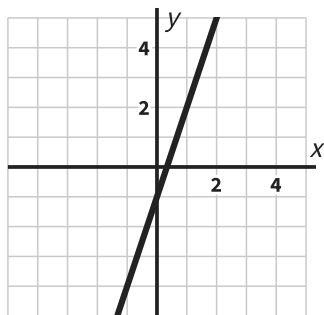
Recognising Linear and Quadratic Graphs *further practice*

ANSWERS

9



Circle one in each row.

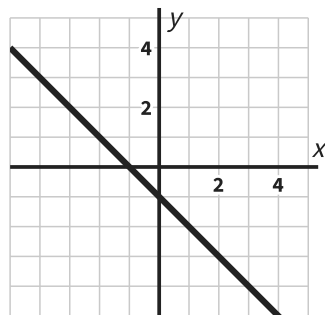


Shape straight line U shape
Type linear quadratic

10



Circle one in each row.



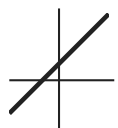
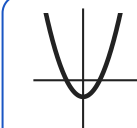
Shape straight line U shape
Type linear quadratic

11



Circle one in each row.

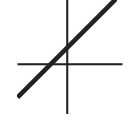
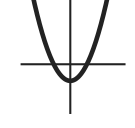
$$y = 6 + x^2$$

x^2 ? no yes
Type linear quadratic
Shape  

12



A plant is y cm tall after x weeks.
 $y = 2x + 5$. Circle one in each row.

x^2 ? no yes
Type linear quadratic
Shape  

13



Write each equation in the table.

$$y = x^2 + 5 \quad y = 4x + 1$$

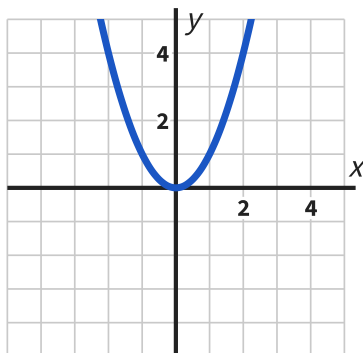
$$y = 7 - x \quad y = x^2 + 8$$

Linear	Quadratic
$y = 4x + 1$	$y = x^2 + 5$
$y = 7 - x$	$y = x^2 + 8$

14



Sketch the graph of $y = x^2$.

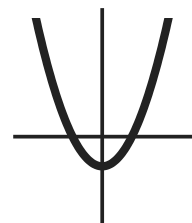


Shape U shape

15



Write an equation that has a U shaped graph.



$y =$ $x^2 + 7$
any equation with x^2

16



Sam says $y = 2x$ is quadratic because it has a 2. What has Sam done wrong?

$$y = 2x \quad \text{quadratic}$$

$2x$ means $2 \times x$, not $x \times x$

So $y = 2x$ is linear (no x^2)