Name _____ Date _____

Unit 11 Graphs

1 A hat costs \$$h$ and a coat costs \$$c$.

The coat costs \$20 more than the hat.

Write a function to show this. _____

_____

2 A man is m years old. A woman is w years old.

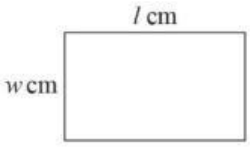
$w = 4m$

Describe in words the connection between the ages of the woman and the man.

_____

_____

3



The length of a rectangle is l cm and the width is w cm.

$w = l - 6$

a Find the width of the rectangle when the length is 15 cm. _____

_____

b Find the length of the rectangle when the width is 30 cm. _____

_____

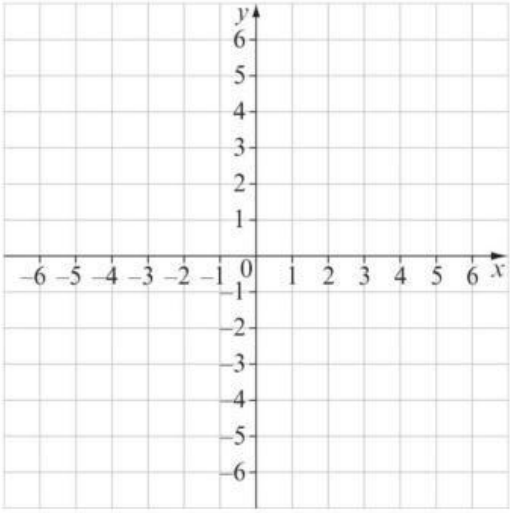
LIVEWORKSHEETS

4 For the function $y = x + 2$:

a Complete this table.

x	−4	−2	0	2	4
$x + 2$			2		

b



Use these axes to draw a graph of $y = x + 2$.

c On the same axes, draw the graph of $y = x - 1$.

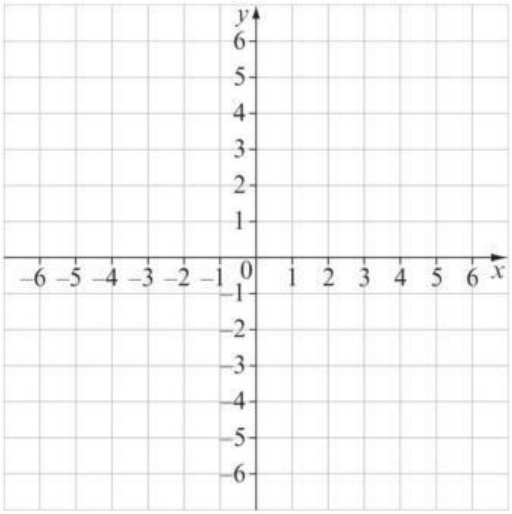
5 For the function $y = 0.5x$:

a Complete this table.

x	−6	−4	−2	0	2	4	6
$0.5x$		−2				2	

LIVEWORKSHEETS

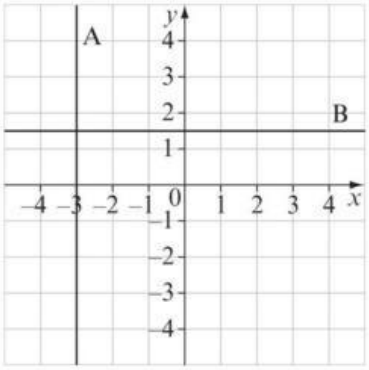
b



Use these axes to draw a graph of $y = 0.5x$.

c On the same axes, draw the graph of $y = 3x$.

6



Write the names of lines A and B on this grid. _____

_____

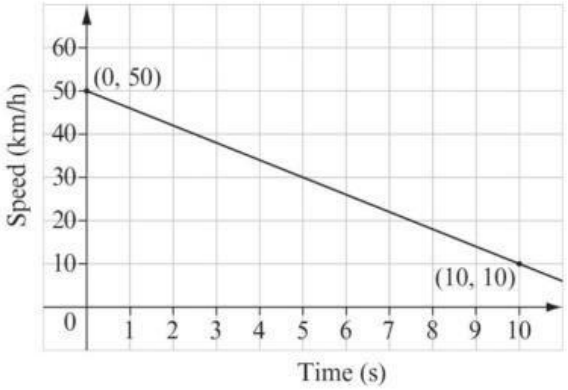
_____

7 A straight line passes through (−4, −8) and (8, −8).

Write the name of the line. _____

LIVEWORKSHEETS

8



This graph shows the speed of a car as it slows down.

a Find the speed of the car after 4 seconds. _____

b How much does the speed of the car decrease every second?

_____

c If the car continues to slow down at the same rate, how long will it take for the car to stop?

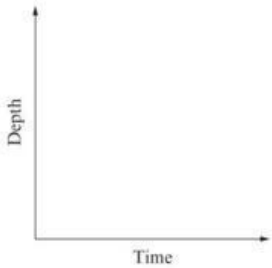
_____

9

This is a circular vase. The top of the vase is narrower than the bottom.

The vase is filled with water at a constant rate.

Use the axes below to sketch a graph to show how the depth of the water changes with time.



LIVEWORKSHEETS