

Chapter 6 Test

For #1 and #2, circle the best answer.

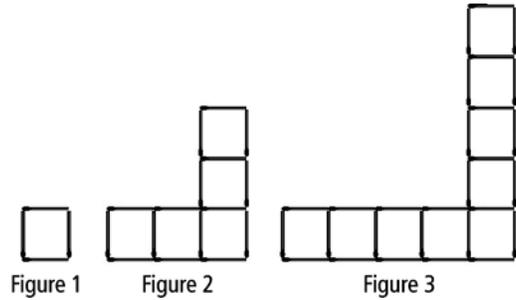
1. Which equation best shows the relationship between the number of matches, m , and the figure number, f ?

A $m = f + 3$

B $m = f + 12$

C $m = 4f - 3$

D $m = 12f - 8$



2. Which table of values best represents this graph of a linear relation?

A

| x | y |
|-----|-----|
| -2 | 0 |
| 0 | 3 |
| 2 | 6 |
| 4 | 9 |

B

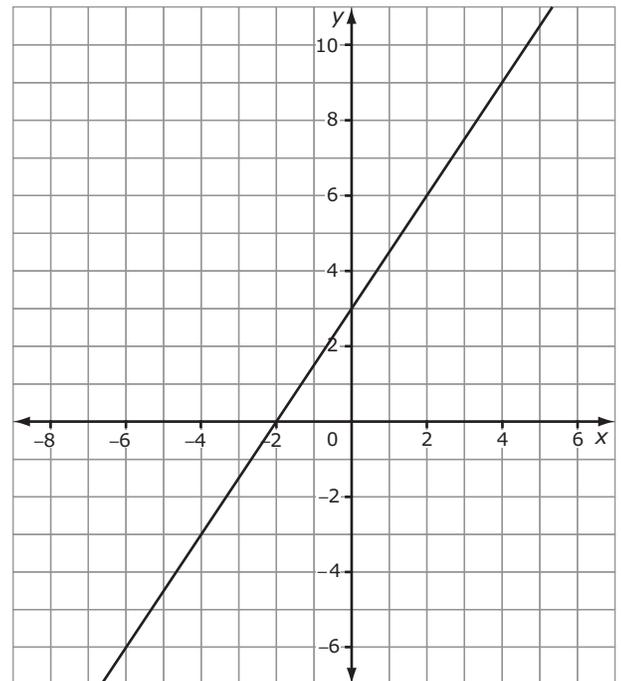
| x | y |
|-----|-----|
| -2 | 0 |
| 0 | 3 |
| 2 | -6 |
| 4 | -9 |

C

| x | y |
|-----|-----|
| -2 | 0 |
| 0 | 3 |
| 2 | 9 |
| 4 | 27 |

D

| x | y |
|-----|-----|
| -2 | 0 |
| 0 | 3 |
| 2 | -9 |
| 4 | -27 |



Complete the statements in #3 and #4. Use the graph in #2.

3. When $x = 4$, the approximate y -coordinate is _____.
4. When $y = -6$, the approximate x -coordinate is _____.



Short Answer

- 5.**
- The yearbook committee is pricing the yearbook.

The printing company charges a flat fee of \$7 per book plus \$0.03 per page. Write a linear equation to represent the relationship between the number of pages in the yearbook and its cost.

Let p = the number of pages

Let c = the cost

Linear Expression: _____

- 6.**
- Amanda works as a waitress.

Change 75% to a decimal.

She earns \$50 a day plus 75% of the tips her customers leave.

- a)**
- Write a linear equation that represents the relationship between earnings and tips.

Let _____ = total earnings

Let _____ = tips (\$)

Equation: _____

- b)**
- The table of values represents Amanda's earnings on different days. Use one of the day's earnings and check your equation.

| Left Side | Right Side |
|-----------|------------|
| | |

| Tips (\$) | Total Earnings (\$) |
|-----------|---------------------|
| 20.00 | 65.00 |
| 50.00 | 87.50 |
| 100.00 | 125.00 |



Name: _____

Date: _____

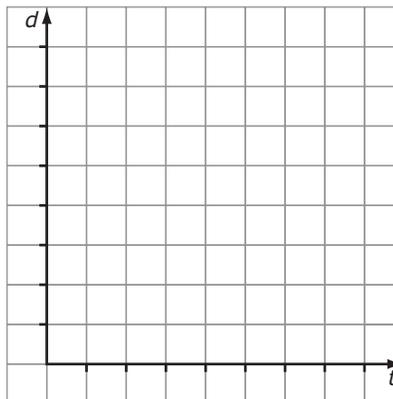
BLM 6-6
(continued)

7. Alex runs at an average speed of 100 m/min. The equation relating distance in metres, d , and time in minutes, t , is $d = 100t$.

a) Complete the table of values.

| Time, t | Distance, d |
|-----------|---------------|
| 0 | |
| 10 | |
| 20 | |
| 30 | |
| 40 | |
| 50 | |

b) Graph the linear relation.

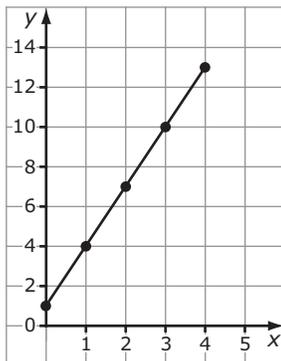


c) Use the graph to estimate how long it takes Alex to run 3.5 km.

1 km = 1000 m

8. a) Complete the table of values.

| x | y |
|-----|-----|
| | |
| | |
| | |
| | |
| | |



b) Write the linear relation this graph represents. _____

