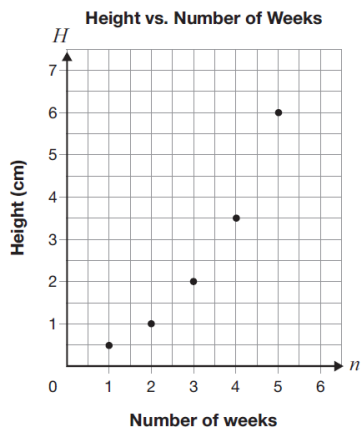


# Review and EQAO Practice for Chapter 5 Part 1 – Modelling with Graphs

## 2016

- 5 Information about the relationship between the height of a plant and time is shown on the grid below.



Which table of values shows only information about this relationship?

a

Number of weeks	Height (cm)
1	2
2	3
6	5

b

Number of weeks	Height (cm)
2	1
3	2
5	6

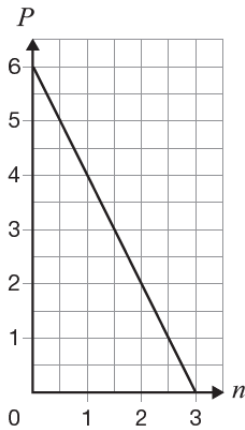
c

Number of weeks	Height (cm)
1	1
2	2
4	7

d

Number of weeks	Height (cm)
2	1
3	2
4	4

- 8 Consider the graph below.

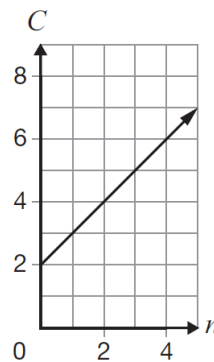


Which of the following is an equation representing this graph?

- a  $P = 2n + 6$
- b  $P = \frac{1}{2}n + 6$
- c  $P = -2n + 6$
- d  $P = -\frac{1}{2}n + 6$

## 2015

- 10 A relationship is represented by the following graph.



Which equation represents this relationship?

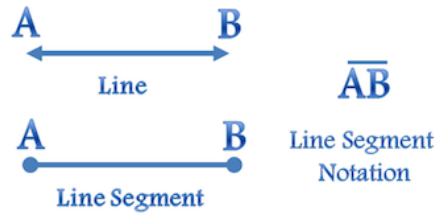
- a  $C = n + 2$
- b  $C = n + 1$
- c  $C = 2n + 2$
- d  $C = 2n + 1$

# 2015

- 21** The end points of line segment AB are  $A(3, -12)$  and  $B(6, k)$ .

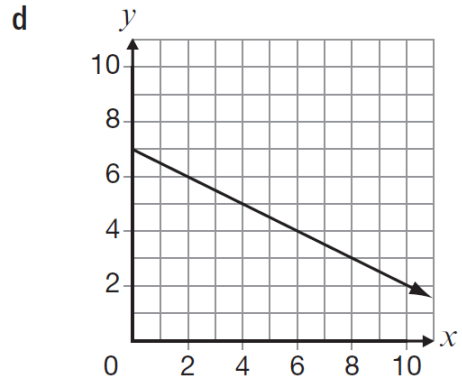
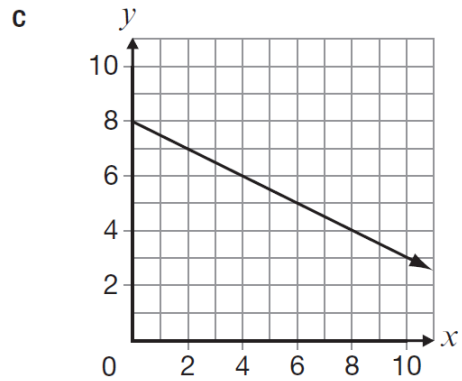
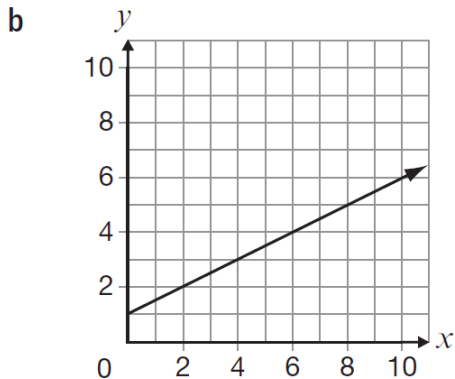
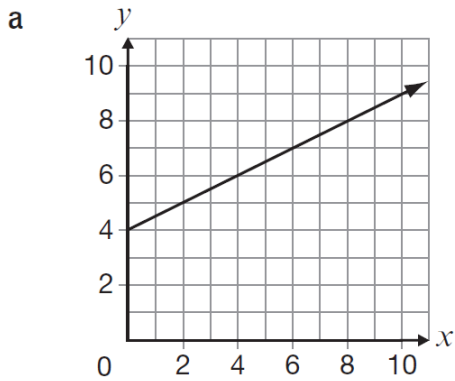
What is the value of  $k$  if the slope of line segment AB is  $-2$ ?

- a  $-18$
- b  $-6$
- c  $6$
- d  $18$



- 23** A line passes through the point  $(6, 4)$  and has a slope of  $-\frac{1}{2}$ .

Which of the following graphs represents this line?



# 2014

**16** A formula for determining the slope of a line is given below.

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

What is the slope of the line that passes through the points (2, 3) and (5, -6)?

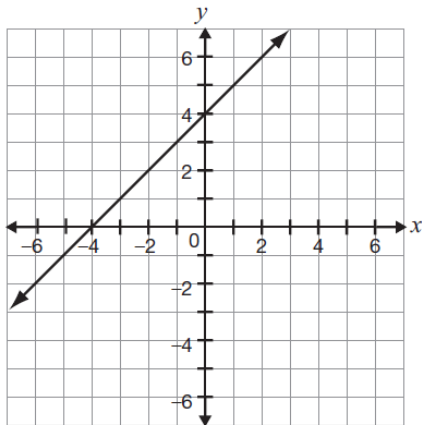
- a -11
- b -3
- c  $-\frac{1}{3}$
- d  $-\frac{1}{11}$

**17** Consider the line represented by the equation  $y = 3x + 2$ .

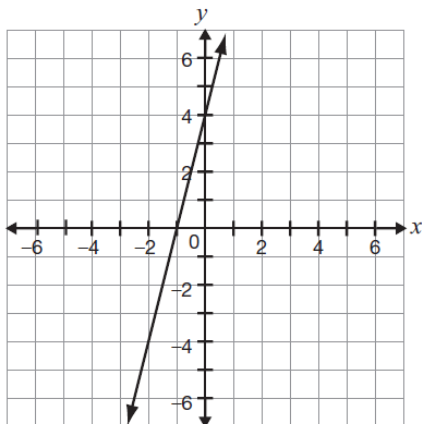
A new line is formed by decreasing the slope and increasing the  $y$ -intercept.

Which of the following could be the graph of the new line?

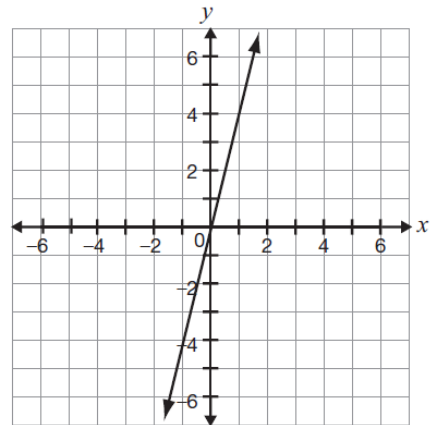
a



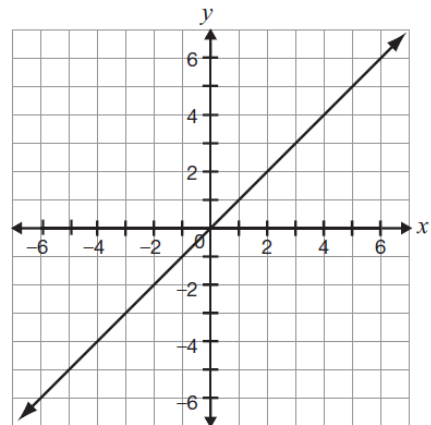
b



c



d



# 2014

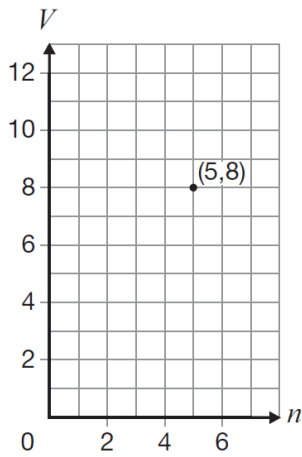
19 A line has a  $y$ -intercept of 4 and a slope of  $-3$ .

Which equation represents this line?

- a  $y = 4x + 3$
- b  $y = 4x - 3$
- c  $y = 4 + 3x$
- d  $y = 4 - 3x$

# 2013

16 The point on the grid below belongs to a linear relation that has  $-\frac{3}{2}$  as its rate of change.

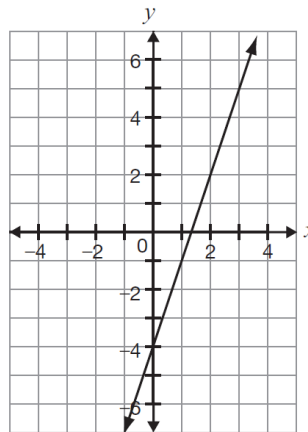


Which of the following points also belongs to this relation?

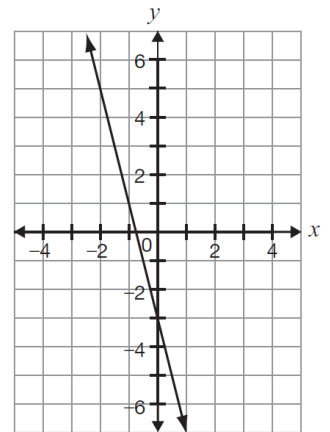
- a (2, 6)
- b (2, 10)
- c (3, 11)
- d (7, 11)

17 Which of the following lines has the same slope as the line represented by  $y = -3x + 4$ ?

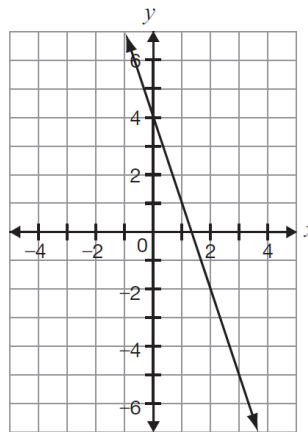
a



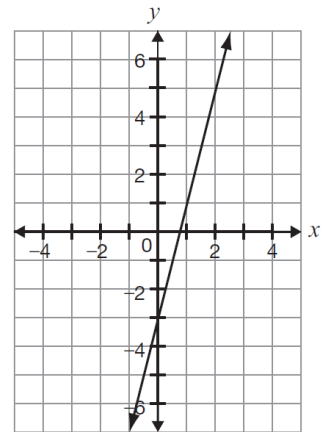
c



b

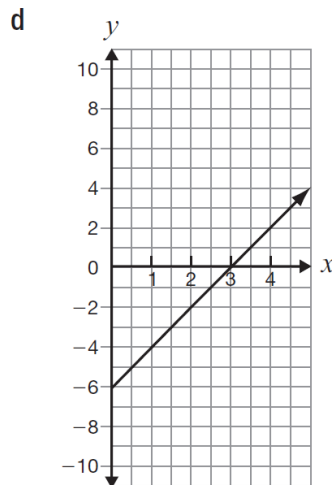
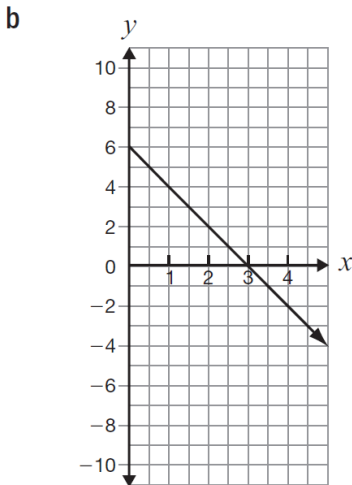
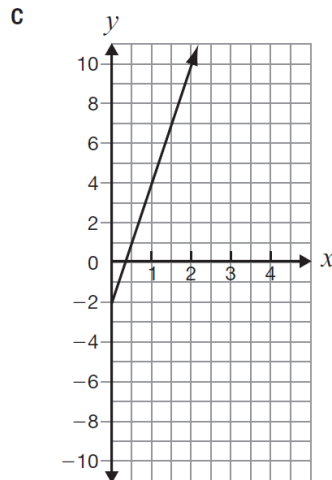
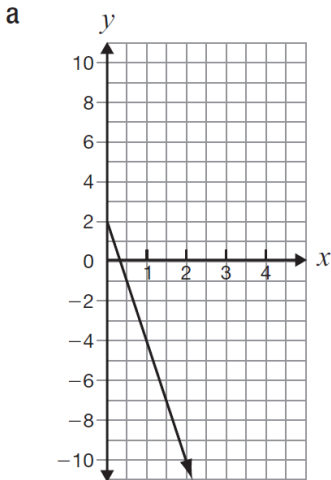


d



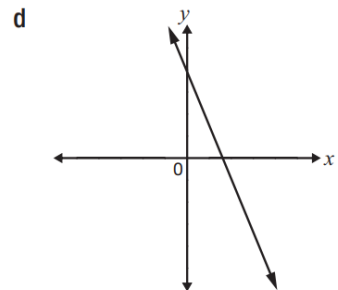
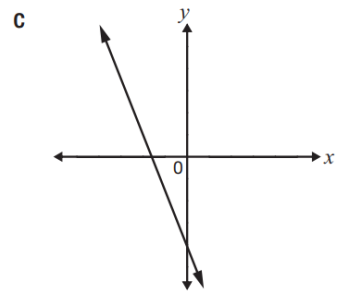
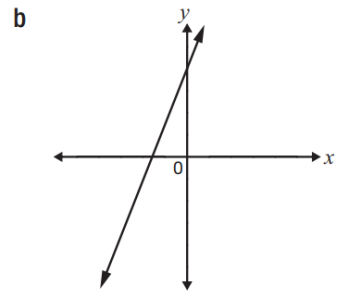
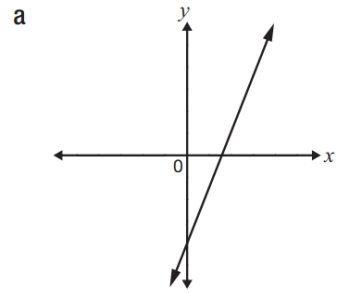
# 2013

19 Which of the following is the graph of the equation  $y = -2x + 6$ ?



# 2018

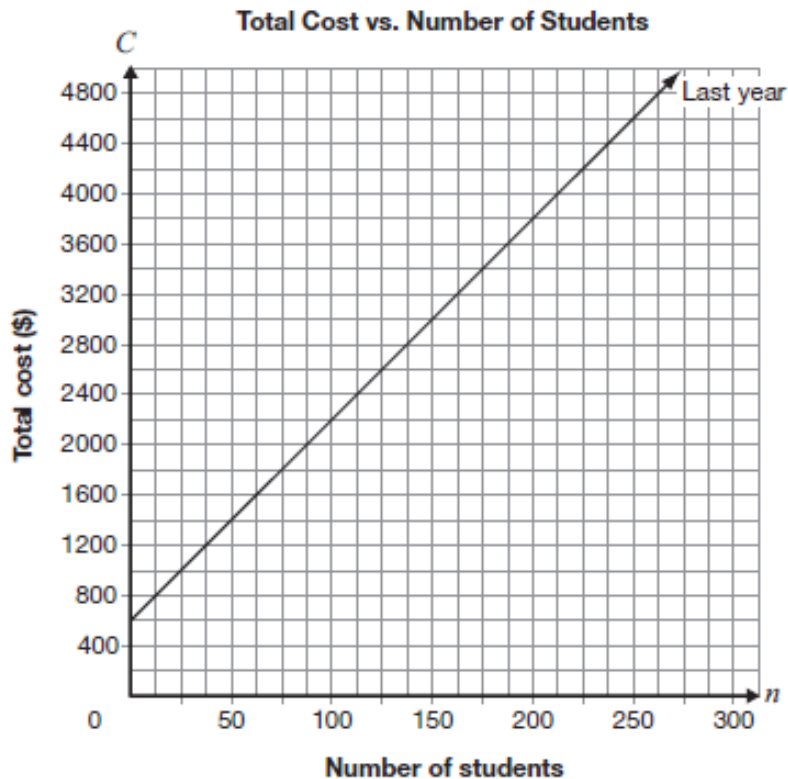
15 Which of these graphs could represent  $y = 5 - 2x$ ?



2017

**I What's the New Price?**

This graph shows information about last year's total cost for a banquet for  $n$  students.



This year the cost per person has decreased by \$5, but the initial fee has doubled.

Determine an equation to represent total cost,  $C$ , for this year.

$C =$  \_\_\_\_\_

Show your work.

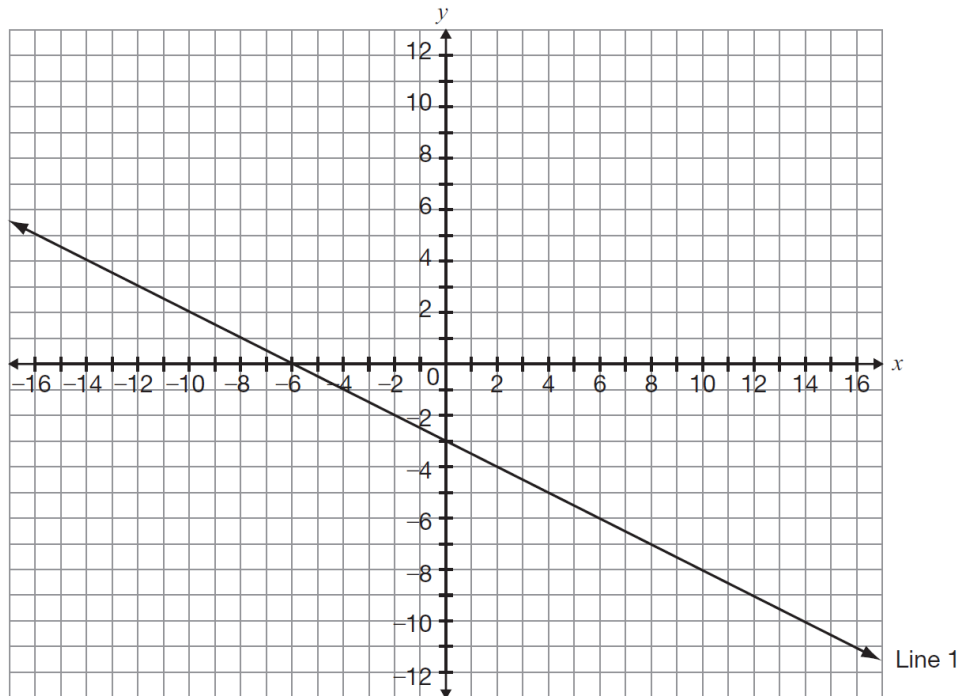
Describe two ways the graph for total cost for this year will be different from the graph for total cost for last year.

Justify your answer.

# 2013

## 23 Lovely Lines

Line 1 is shown on the grid below.



Graph Line 2 on the same grid so that it passes through  $A(-10, 8)$  and has a slope that is three times the slope of Line 1.

Justify your answer.