

Name \_\_\_\_\_

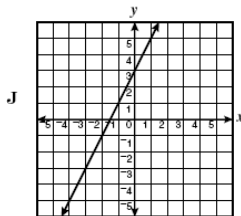
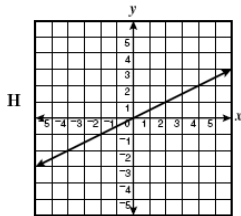
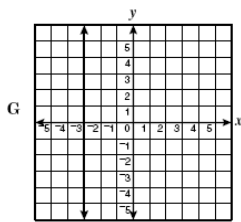
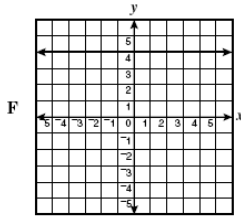
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## A.18

1.

In which graph is  $y$  a direct variation of  $x$ ?



2.

The gas pressure in a chamber varies directly with the temperature in the chamber. If the pressure in the chamber is 150 atmospheres (atm) when the chamber is at  $50^{\circ}\text{F}$ , what is the pressure in the chamber when the temperature of the chamber is  $75^{\circ}\text{F}$ ?

- F 175 atm  
 G 200 atm  
 H 225 atm  
 J 275 atm

3.

If  $a$  varies directly as  $b$  and  $a = 3$  when  $b = 12$ , what is the value of  $a$  when  $b = 18$ ?

- A 0.25  
 B 4  
 C 4.5  
 D 72

4.

In which table of ordered pairs does  $n$  vary directly as  $m$ ?

F

$m$	$n$
-2	-1
-1	-2
1	2

G

$m$	$n$
-2	4
-1	2
1	-2

H

$m$	$n$
-2	-2.5
-1	-5.0
1	5.0

J

$m$	$n$
-2	-2
-1	-4
1	4

5.

Jill was looking at a picture of herself and 3 friends. She measured the height of her image as 10 centimeters. If Jill is actually 60 inches tall, which equation can she use to find  $h$ , the actual height in inches, of one of her friends who is  $c$  centimeters tall in the picture?

A  $h = 10c$

B  $h = 6c$

C  $h = \frac{5}{3}c$

D  $h = \frac{1}{6}c$

6.

$x$	$y$
1	\$0.05
2	\$0.10
3	\$0.15
4	\$0.20
5	\$0.25

Which is an equation for the variation that includes all the data in the table?

F  $xy = 0.05$

G  $y = x + 0.05$

H  $y = 0.05x$

J  $y = \frac{x}{0.05}$

7.

If  $y$  varies directly as  $x$  and the constant of variation is  $-2$ , which equation represents this relationship?

A  $y = -2x$

B  $y = \frac{-2}{x}$

C  $y = \frac{x}{-2}$

D  $y = 2x$

8.

The number of words Maria typed varied directly with the amount of time she spent typing. If she typed 275 words in 5 minutes, how long would it take her to type 1,100 words?

A 220 minutes

B 20 minutes

C 15 minutes

D 4 minutes

9.

The number of words Maria typed varied directly with the amount of time she spent typing. If she typed 275 words in 5 minutes, how long would it take her to type 1,100 words?

A 220 minutes

B 20 minutes

C 15 minutes

D 4 minutes