

**Determine a constant of proportionality****1**

Find the ratio that this equivalent fraction has been multiplied by

$$\frac{1}{4} \times \frac{?}{?} = \frac{5}{20}$$

A

$$\frac{5}{5}$$

B

$$\frac{6}{6}$$

2

Complete the equivalent fraction by finding the missing numerator

$$\frac{2}{14} = \frac{?}{56}$$

A

12

B

6

C

8

D

9

E

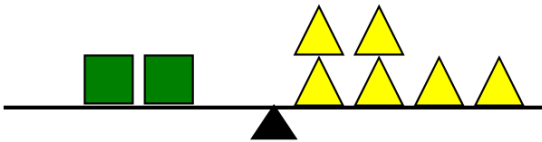
4

F

10

3

Which equation represents the solution to the bottom scale?



A

$$7t + s = s$$

B

$$4t + s = s$$

C

$$7t = s$$

D

$$3t + s = s$$

E

$$3t = s$$

4

Solve for the variable in the equation

$$8d = 32$$

A

$$d = 1$$

B

$$d = 2$$

C

$$d = 5$$

D

$$d = 4$$

E

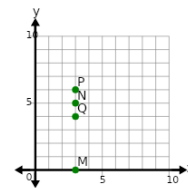
$$d = 6$$

F

$$d = 7$$

5

For the equation $y = 2x$, what point is at $x = 3$?



A Q

B P

C M

D N

6

What chart of X, Y values matches this line equation?

$$y = \frac{1}{3}x$$

A

X	Y
0	0
1	3
2	6
3	9
4	12

B

X	Y
0	0
1	0.33
2	0.67
3	1
4	1.33

**Determine a constant of proportionality****7**

What line equation would create this set of X, Y values?

X	Y
0	1
1	2
2	3
3	4

A $y = -1x$

B $y = \frac{1}{2}x$

C $y = 1x$

8

What rule turns each input into its output?

Input	Output
6	3
8	4
12	?
14	7
16	8

A multiply by 12

B divide by 2

C multiply by 7

D divide by 8

9

How many tennis balls are there?

tennis balls : ?

soccer balls : 16

(tennis : soccer) = (5 : 4)

A 6

B 16

C 20

D 18

10

This sauce needs $\frac{1}{2}$ cup of mustard for every $\frac{3}{4}$ cup of ketchup. How many cups of mustard is needed if you have $\frac{9}{20}$ cup of ketchup



9/20 cup

? cup

A

$$\frac{3}{10} \text{ cup}$$

B

$$4\frac{1}{3} \text{ cup}$$

C

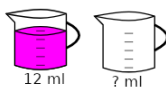
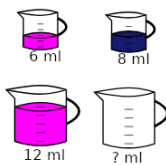
$$\frac{13}{120} \text{ cup}$$

D

$$\frac{27}{160} \text{ cup}$$

11

This paint color needs 8 ml of blue for every 6 ml of magenta. How much blue is needed if you have 12 ml of magenta



A 12 ml

B 16 ml

C 15 ml

D 13 ml

12

An investment of \$500 earns \$240 in simple interest over 8 years. How much interest would be earned if the principal were \$125, with the rate and time unchanged?

A \$960

B \$240

C \$60

D \$48