

Name: Key

**MODULE 2- TOPIC 1- LESSON 1 REVIEW WORKSHEET**

1. Answer the questions that follow each relationship.

a.  $y = \frac{7}{8}x$

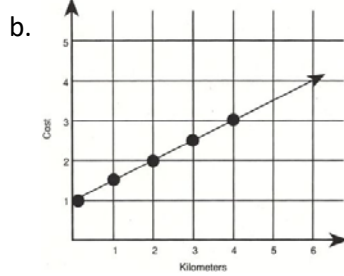
Proportional? Yes

Why or why not?

The equation is of the form  $y=kx$

Constant of

Proportionality (k)?  $\frac{7}{8}$



b.

Proportional? No

Why or why not?

The line does not go through the origin

Constant of

Proportionality (k)? none

c.

X	Y
1	4
2	8
3	9

$\frac{4}{1} = \frac{4}{1}$   
 $\frac{8}{2} = \frac{4}{1}$   
 $\frac{9}{3} = \frac{3}{1}$

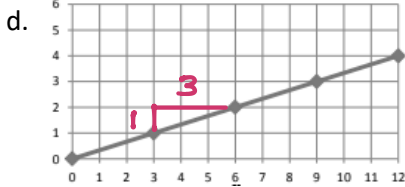
Proportional? No

Why or why not?

Not the same constant of proportionality

Constant of

Proportionality (k)? none



d.

Proportional? Yes

Why or why not?

The line goes through the origin.

Constant of

Proportionality (k)?  $\frac{1}{3}$

e.  $y = 3x + 6$

Proportional? No

Why or why not?

The equation is not of the form  $y=kx$

Constant of

Proportionality (k)? none

f.

X	Y
4	6
6	9
10	15

$\frac{6}{4} = \frac{3}{2}$   
 $\frac{9}{6} = \frac{3}{2}$   
 $\frac{15}{10} = \frac{3}{2}$

Proportional? Yes

Why or why not?

Same constant of proportionality

Constant of

Proportionality (k)?  $\frac{3}{2}$

2. Identify the constant of proportionality for each of the given lines.

a:  $\frac{5}{2}$

b:  $\frac{5}{4}$

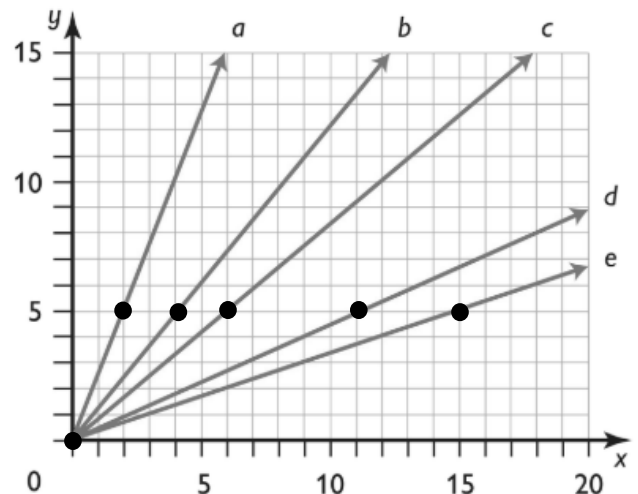
c:  $\frac{5}{6}$

d:  $\frac{5}{11}$

e:  $\frac{5}{15} = \frac{1}{3}$

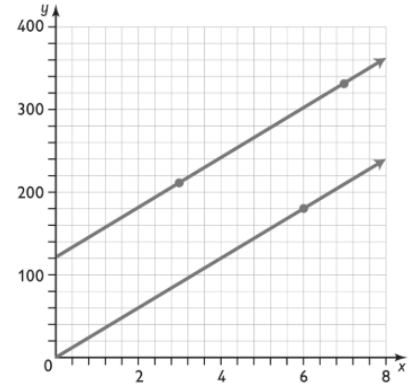
Which line has the greatest constant of proportionality? How do you know?

Line a because it has the highest constant of proportionality.

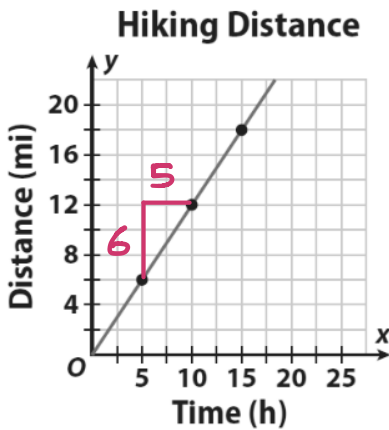


3.

	TOP LINE	BOTTOM LINE
Linear or Non-Linear	Linear	linear
Proportional or Non-Proportional	non-proportional	proportional

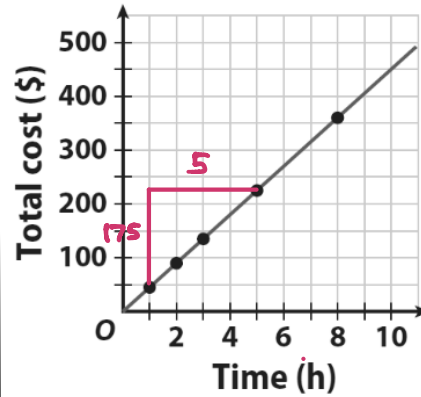


4. What is the rate of change of the provided graph?



$$\frac{6}{5}$$

5. Write the equation that represents the line below.



$$y = \underline{35x}$$

$$\frac{175}{5} = 35$$

6. True or False?

- a. A linear relationship is ALWAYS proportional. False
- b. A linear relationship is ALWAYS non-proportional. False
- c. A proportional relationship contains the point (0, 0). True
- d. A non-proportional relationship has a constant rate of change. True
- e. A proportional relationship is ALWAYS linear. True

7. Which line would have the greatest rate of change?

a.  $y = 5x$   
↓  
5

b.  $y = 7x$   
↓  
7

c.  $y = \frac{3}{4}x$   
↓  
 $\frac{3}{4}$

d.  $y = 2.1x$   
↓  
2.1