

Angeles City Science High School
Mathematics 9

Name: Paul Gerald D. Pare

Section: 9 – Adenine

Content:

- What I know: Translate
- What's In: What Am I?
- What's More: Complete Me!
- What I can Do: Test Yourself!

Math a2w1

What I know: Translate

$$1. x + 2 = 15$$

$$2. y - 4 = 12$$

$$3. 2m = 42$$

$$4. 3c = \frac{1}{2}c$$

$$5. \frac{1}{2}k - 14 = 25$$

$$6. \sqrt{x} + 7 = 18$$

$$7. t^2 = 10 + h$$

$$8. 3(6b - 3) = 30$$

$$9. 2(v + w) = 3v$$

$$10. \frac{x}{s} = s + 2$$

What's In: What Am I?

$$1. V = khr^2$$

2. S varies directly as t and inversely as u.

$$3. I = kd$$

$$4. P = \frac{k}{g}$$

5. L varies directly as m.

$$6. C = kw$$

7. T varies inversely as the square of w.

$$8. A = \frac{kd}{t^2}$$

$$9. A = kbh$$

10. M varies directly as n.

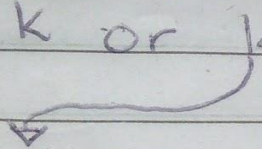
What's More: Complete Me!

1. Type: Direct Variation

$$y = kx$$

$$2 = k(1)$$

$$2 = k \text{ or } k = 2$$


$$y = kx$$

$$\text{ME: } y = 2x$$

VS: y varies directly as x

2. Type: Inverse Variation

$$y = \frac{k}{x}$$

~~$$\frac{8}{1} = \frac{k}{9}$$~~

$$72 = k \text{ or } k = 72$$

$$\text{ME: } y = \frac{72}{x}$$

VS: y is inversely proportional to x

3. Type: Inverse Variation

$$y = \frac{k}{x}$$

~~$$\frac{6}{1} = \frac{k}{6}$$~~

$$36 = k \text{ or } k = 36$$

$$\text{ME: } y = \frac{36}{x}$$

VS: y is inversely proportional to x

4. Type: Direct Variation

$$y = kx$$

$$10 = k(2)$$

$$\frac{10}{2} = \frac{2k}{2}$$

$$k = 5$$

$$\text{ME: } y = 5x$$

VS: y varies directly as x

c. Type: Direct Variation

$$y = kx$$

$$9 = k(3)$$

$$\frac{9}{3} = \frac{3k}{3}$$

$$3 = k \text{ or } k = 3$$

$$\text{ME: } y = 3x$$

VS: y varies directly as x

What Can I Do: Test Yourself!

1. Inverse Variation

2. Direct Variation

3.

Given graph	Variation Statement	K	SE	ME
-------------	---------------------	---	----	----

Graph A	The temperature T varies inversely as the depth d .	14000	$T = \frac{k}{d}$	$T = \frac{14000}{d}$
---------	---	-------	-------------------	-----------------------

Graph B	The price P varies directly as the mass m .	1.15	$P = km$	$P = 1.15m$
---------	---	------	----------	-------------

Solution:

Graph A

$$y = \frac{k}{x}$$

~~$$\frac{56}{1} = \frac{k}{250}$$~~

$$14000 = k \text{ or } k = 14000$$

Graph B

$$y = kx$$

$$1.15 = k(1)$$

$$1.15 = k \text{ or } k = 1.15$$