APRIL 7, 2016

UNIT 6: LINEAR RELATIONS

4.4: MATCHING EQUATIONS AND GRAPHS

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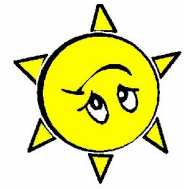
MATH 9

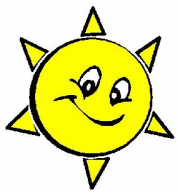
WHAT'S THE POINT OF TODAY'S LESSON?

We will continue working on the Math 9 Specific Curriculum Outcome (SCO) "Patterns and Relations 2" OR "PR2" which states:

"Graph linear relations, analyze the graph and interpolate or extrapolate to solve problems."



Warm-Up Grade 9



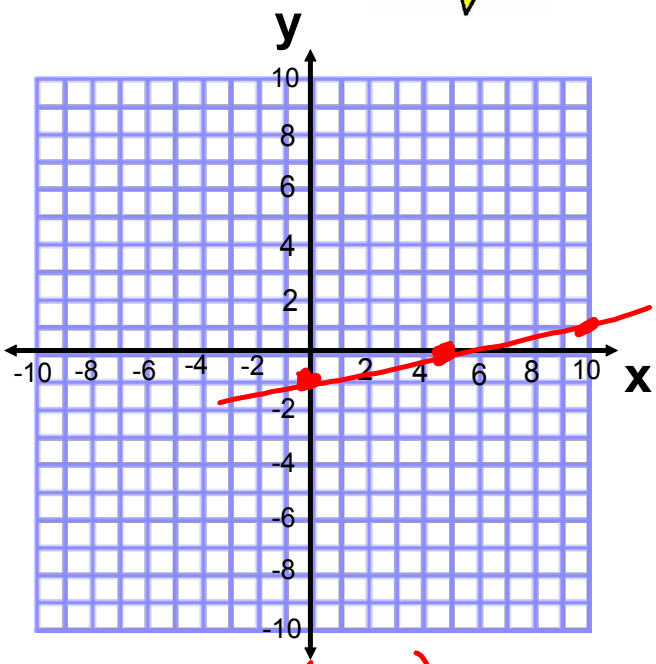
Graph the following equation. If you use a table of values, choose "nice" numbers for x.)

$\frac{1}{5}x - y = 1$

$\frac{1}{5}x = 1 + y$

$\frac{1}{5}x - 1 = y$

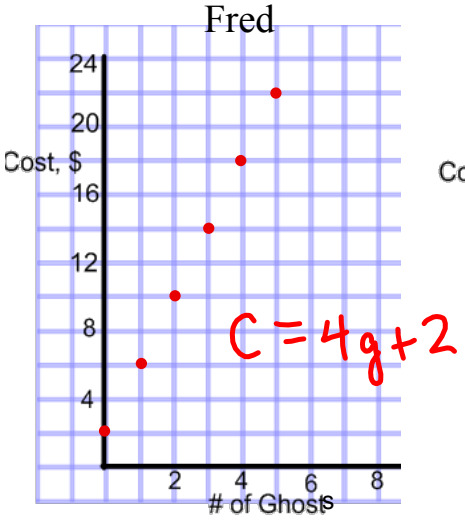
$y = \frac{1}{5}x - 1$



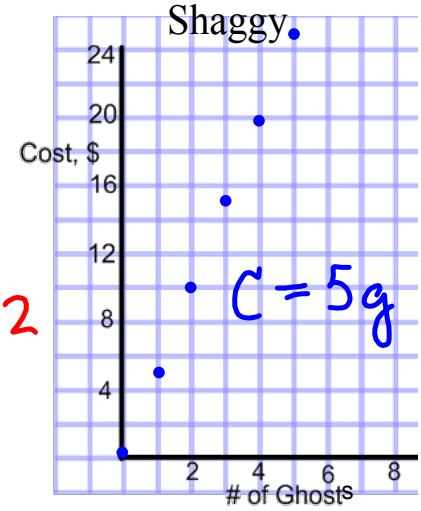
(0, -1)
(5, 0)
(10, 1)

Fred, Shaggy and Scooby are hired to find ghosts. Each ghost hunter charges a different rate. These graphs show how the cost is related to the number of ghosts caught.

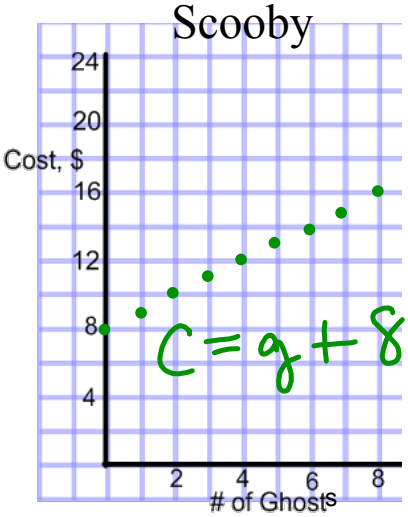
Fred



Shaggy



Scooby



Match each graph with its equation:

$C = g + 8$ $\quad$ $C = 5g + 0$ $\quad$ $C = 4g + 2$

Explain your strategy:

* Did you use 'y = mx + b' ?

* Did you plug in a value for 'g' and see what 'C' is? (ex: g = 1)

* Did anyone use a different strategy?

Substitute points from graphs:

(g, c) (4, 12)	(g, c) (3, 15)	(g, c) (2, 10)
$C = 4g + 2$	$C = 4g + 2$	$C = 4g + 2$
$12 = 4(4) + 2$	$15 = 4(3) + 2$	$10 = 4(2) + 2$
$12 = 16 + 2$	$15 = 12 + 2$	$10 = 8 + 2$
$12 \neq 18$	$15 \neq 14$	$10 = 10$ ✓
~~✗ Scooby~~	~~✗ Shaggy~~	✓ Fred

CONCEPT REINFORCEMENT:

MMS9:

page 188: #3 TO #5

page 189: #6 TO #9