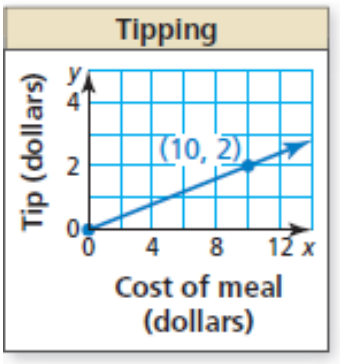
A# _____

Algebra 2: Worksheet 1A

Use the graph to write an equation of the line and interpret the slope.

1)



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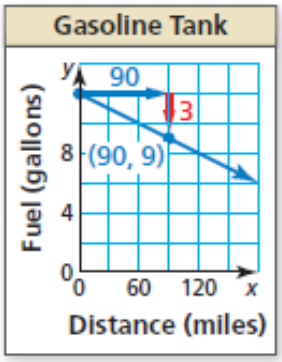

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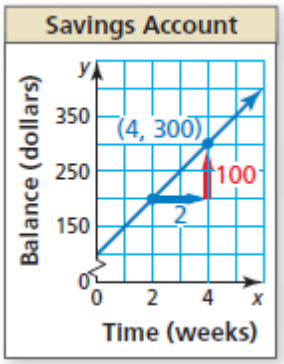

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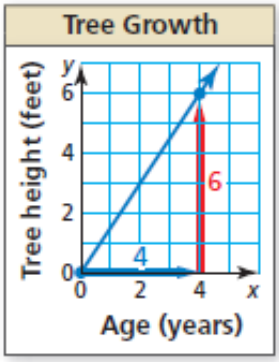

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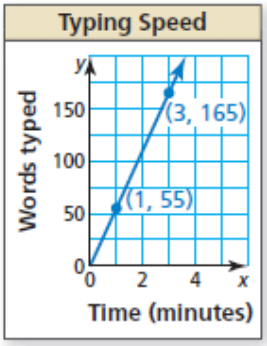

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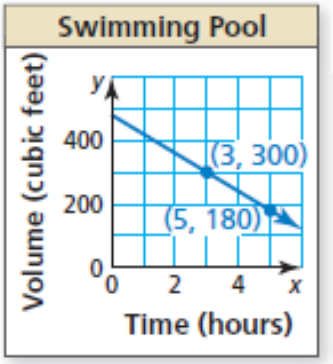

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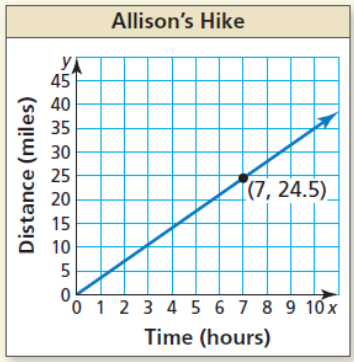

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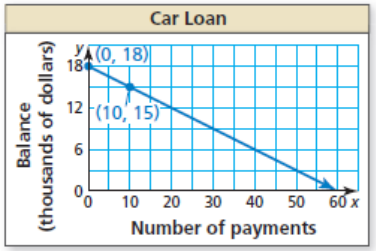

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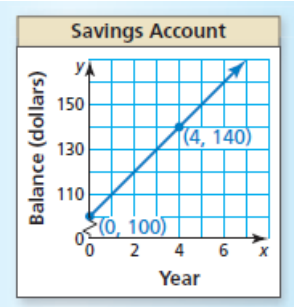

10) Two newspapers charge a fee for placing an advertisement in their paper plus a fee based on the number of lines in the advertisement. The table shows the total costs for different length advertisements at the Daily Times. The total cost y (in dollars) for an advertisement that is x lines long at the Greenville Journal is represented by the equation $y = 2x + 20$.

Daily Times	
Number of lines, x	Total cost, y
4	27
5	30
6	33
7	36
8	39

a. Which newspaper charges less per line?

b. How many lines must be in an advertisement for the total costs to be the same?

11) While on vacation in Canada, you notice that temperatures are reported in degrees Celsius. You know there is a linear relationship between Fahrenheit and Celsius, but you forget the formula. From science class, you know the freezing point of water is $0^\circ C$ or $32^\circ F$, and its boiling point is $100^\circ C$ or $212^\circ F$.

a. Write an equation that represents degrees Fahrenheit in terms of degrees Celsius.

b. The temperature outside is $22^\circ C$. What is this temperature in degrees Fahrenheit?

c. Rewrite your equation in part (a) to represent degrees Celsius in terms of degrees Fahrenheit.

d. The temperature of the hotel pool water is $83^\circ F$. What is this temperature in degrees Celsius?

12) Write the equation of the line that passes through the point given and has the given slope.

a. $(0,-2), m = 4$ b. $(3,-1), m = -3$ c. $(-4,2), m = \frac{3}{2}$

13) Write the equation of the line that passes through the points given.

a. $(-1,3),(2,9)$ b. $(4,-1),(6,-7)$ c. $(-1,2),(3,-4)$