### Lesson 13 Practice Problems

1. For each equation, find $y$ when $x=-3$. Then find $x$ when $y=2$
	1. $y=6x+8$
	2. $y=\frac{2}{3}x$
	3. $y=-x+5$
	4. $y=\frac{3}{4}x−2\frac{1}{2}$
	5. $y=1.5x+11$
2. True or false: The points $\left(6,13\right)$, $\left(21,33\right)$, and $\left(99,137\right)$ all lie on the same line. The equation of the line is $y=\frac{4}{3}x+5$. Explain or show your reasoning.
3. Here is a linear equation: $y=\frac{1}{4}x+\frac{5}{4}$
	1. Are $\left(1,1.5\right)$ and $\left(12,4\right)$ solutions to the equation? Explain or show your reasoning.
	2. Find the $x$-intercept of the graph of the equation. Explain or show your reasoning.
4. Find the coordinates of $B$, $C$, and $D$ given that $AB$ = 5 and $BC$ = 10.
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* (From Unit 2, Lesson 11.)
1. Match each graph of a linear relationship to a situation that most reasonably reflects its context.
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	1. Graph A
	2. Graph B
	3. Graph C
	4. Graph D
	5. $y$ is the weight of a kitten $x$ days after birth.
	6. $y$ is the distance left to go in a car ride after $x$ hours of driving at a constant rate toward its destination.
	7. $y$ is the temperature, in degrees C, of a gas being warmed in a laboratory experiment.
	8. $y$ is the amount of calories consumed eating $x$ crackers.
* (From Unit 3, Lesson 9.)



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