### Lesson 14 Practice Problems

1. The solution to $5−3x>35$ is either $x>-10$ or $-10>x$. Which solution is correct? Explain how you know.
2. The school band director determined from past experience that if they charge $t$ dollars for a ticket to the concert, they can expect attendance of $1000−50t$. The director used this model to figure out that the ticket price needs to be $8 or greater in order for at least 600 to attend. Do you agree with this claim? Why or why not?
3. Which inequality is true when the value of $x$ is -3?
	1. $-x−6<-3.5$
	2. $-x−6>3.5$
	3. $-x−6>-3.5$
	4. $x−6>-3.5$
* (From Unit 6, Lesson 13.)
1. Draw the solution set for each of the following inequalities.
	1. $x\leq 5$
	* 
	1. $x<\frac{5}{2}$
	* 
* (From Unit 6, Lesson 13.)
1. Write three different equations that match the tape diagram.
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* (From Unit 6, Lesson 3.)
1. A baker wants to reduce the amount of sugar in his cake recipes. He decides to reduce the amount used in 1 cake by $\frac{1}{2}$ cup. He then uses $4\frac{1}{2}$ cups of sugar to bake 6 cakes.
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	1. Describe how the tape diagram represents the story.
	2. How much sugar was originally in each cake recipe?
* (From Unit 6, Lesson 2.)
1. One year ago, Clare was 4 feet 6 inches tall. Now Clare is 4 feet 10 inches tall. By what percentage did Clare’s height increase in the last year?
* (From Unit 4, Lesson 12.)



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