### Lesson 16 Practice Problems

1. Lin was looking at the equation $2x−32+4\left(3x−2462\right)=14x$. She said, “I can tell right away there are no solutions, because on the left side, you will have $2x+12x$ and a bunch of constants, but you have just $14x$ on the right side.” Do you agree with Lin? Explain your reasoning.
2. Han was looking at the equation $6x−4+2\left(5x+2\right)=16x$. He said, “I can tell right away there are no solutions, because on the left side, you will have $6x+10x$ and a bunch of constants, but you have just $16x$ on the right side.” Do you agree with Han? Explain your reasoning.
3. Decide whether each equation is true for all, one, or no values of $x$.
	1. $6x−4=-4+6x$
	2. $4x−6=4x+3$
	3. $-2x+4=-3x+4$
4. Solve each of these equations. Explain or show your reasoning.
	1. $3\left(x−5\right)=6$
	2. $2\left(x−\frac{2}{3}\right)=0$
	3. $4x−5=2−x$
* (From Unit 4, Lesson 13.)
1. In the picture triangle $A^{′}B^{′}C^{′}$ is an image of triangle $ABC$ after a rotation. The center of rotation is $E$.
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	1. What is the length of side $AB$? Explain how you know.
	2. What is the measure of angle $D^{′}$? Explain how you know.
* (From Unit 1, Lesson 6.)
1. Solve each of these equations. Explain or show your reasoning.
* $2\left(x+5\right)=3x+1$
* $3y−4=6−2y$
* $3\left(n+2\right)=9\left(6−n\right)$
*
* (From Unit 4, Lesson 13.)



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