## Unit 7 Lesson 10 Cumulative Practice Problems

1. A triangle has sides of length 7 cm, 4 cm, and 5 cm. How many unique triangles can be drawn that fit that description? Explain or show your reasoning.
2. A triangle has one side that is 5 units long and an adjacent angle that measures $25^{∘}$. The two other angles in the triangle measure $90^{∘}$ and $65^{∘}$. Complete the two diagrams to create two *different* triangles with these measurements.
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1. Is it possible to make a triangle that has angles measuring 90 degrees, 30 degrees, and 100 degrees? If so, draw an example. If not, explain your reasoning.
2. Segments $CD$, $AB$, and $FG$ intersect at point $E$. Angle $FEC$ is a right angle. Identify any pairs of angles that are complementary.
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* (From Unit 7, Lesson 2.)
1. Match each equation to a step that will help solve the equation for $x$.
	1. $3x=-4$
	2. $-4.5=x−3$
	3. $3=\frac{-x}{3}$
	4. $\frac{1}{3}=-3x$
	5. $x−\frac{1}{3}=0.4$
	6. $3+x=8$
	7. $\frac{x}{3}=15$
	8. $7=\frac{1}{3}+x$
	9. Add $\frac{1}{3}$ to each side.
	10. Add $\frac{-1}{3}$ to each side.
	11. Add $3$ to each side.
	12. Add $-3$ to each side.
	13. Multiply each side by 3..
	14. Multiply each side by $-3$.
	15. Multiply each side by $\frac{1}{3}$.
	16. Multiply each side by $\frac{-1}{3}$
* (From Unit 5, Lesson 15.)
	1. If you deposit $300 in an account with a 6% interest rate, how much will be in your account after 1 year?
	2. If you leave this money in the account, how much will be in your account after 2 years?
* (From Unit 4, Lesson 8.)



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