# Lesson 10 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.
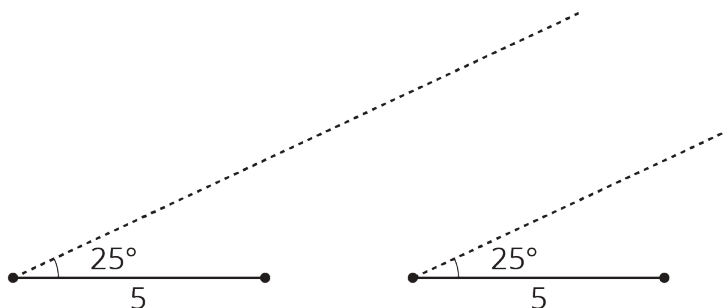
3. Is it possible to make a triangle that has angles measuring 90 degrees, 30 degrees, and 100 degrees? If so, draw an example. If not, explain your reasoning.

Grade 7 Unit 7
Lesson 10

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4. Segments CD, AB, and FG intersect at point E. Angle FEC is a right angle. Identify any pairs of angles that are complementary.
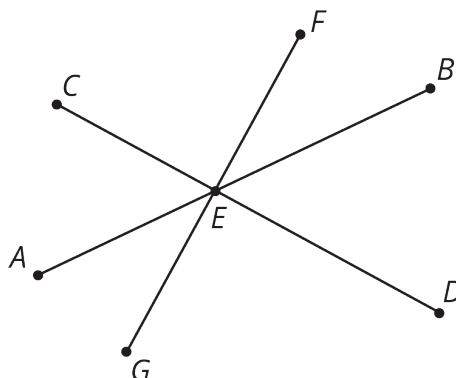
(From Unit 7, Lesson 2.)

5. Match each equation to a step that will help solve the equation for x.

A. $3x = -4$

B. $-4.5 = x - 3$

C. $3 = \frac{-x}{3}$

D. $\frac{1}{3} = -3x$

E. $x - \frac{1}{3} = 0.4$

F. $3 + x = 8$

G. $\frac{x}{3} = 15$

H. $7 = \frac{1}{3} + x$

1. Add $\frac{1}{3}$ to each side.

2. Add $\frac{-1}{3}$ to each side.

3. Add 3 to each side.

4. Add -3 to each side.

5. Multiply each side by 3..

6. Multiply each side by -3.

7. Multiply each side by $\frac{1}{3}$.

8. Multiply each side by $\frac{-1}{3}$

(From Unit 5, Lesson 15.)

6. a. If you deposit $300 in an account with a 6% interest rate, how much will be in your account after 1 year?

b. If you leave this money in the account, how much will be in your account after 2 years?

(From Unit 4, Lesson 8.)