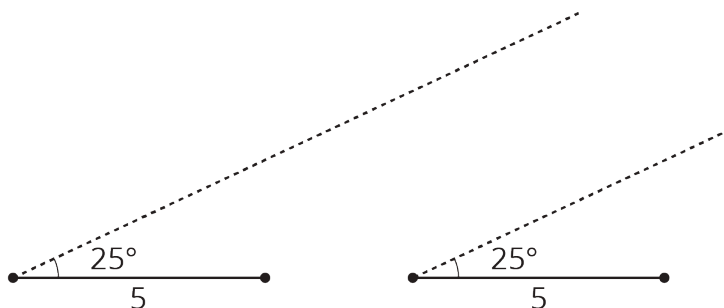


Unit 7 Lesson 10 Cumulative Practice Problems

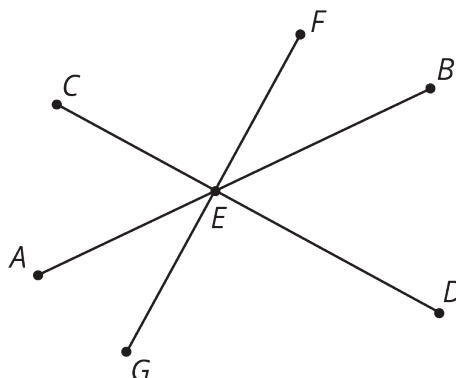
1. A triangle has sides of length 7 cm, 4 cm, and 5 cm. How many unique triangles can be drawn that fit that description? Explain or show your reasoning.

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.



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.

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. $3x = -4$

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

B. $-4.5 = x - 3$

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

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

3. Add 3 to each side.

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

4. Add -3 to each side.

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

5. Multiply each side by 3..

F. $3 + x = 8$

6. Multiply each side by -3.

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

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

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

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.)