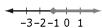
# Chapter 10 Warm-Up

### Section 10.1

1. A student draws the following number line for the inequality x > -1. Is this correct? Why or why not?



2. Your aunt has children whose ages range between 18 and 25 years of age. Write an inequality to represent their ages.

**3.** Solve: -5x < -10

4. Draw a number line for the solutions to: 2x - 8 > 15

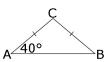
**5.** Solve: 3(2x - 1) < 8(x + 1)

### **Mental Math**

**6.** Find the measure of the obtuse angle on this straight line.

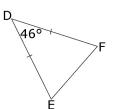


**7.** All angles in the triangle add up to 180°. Find the measure of  $\angle C$ .



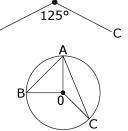
8. In this isosceles triangle, D. what is the measure of

/F?



**9.** What is the measure of reflex ∠ABC?

**10.** Identify all the line segments that are the same length in this diagram.

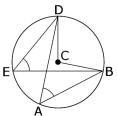


## Section 10.2

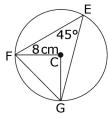
**1.** When solving inequalities what happens when both sides of the equation are multiplied by a negative number?

**2.** Solve: 3(x - 7) < -5x

3. What types of angles are ∠DCB and ∠DAB and how are they related?



4. What is the measure of obtuse ∠FCG?



**5.** Draw an inscribed angle that has a measure of 90° and that is subtended by a chord. Label the centre in your diagram.

### **Mental Math**

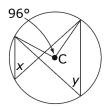
**6.** Draw a circle and within the circle draw each of these lengths: a chord, a diameter, and a radius.

7. Draw a line and label the point A as the midpoint of this line.

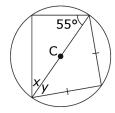
- **8.** Find the missing length  $_{\rm 5~cm}$ in this right triangle. 12 cm
- 9. Find the height of this 5 cm isosceles triangle.
- **10.** Two lines are perpendicular when they meet at 90°. Look around you and name two pairs of objects that are perpendicular to one another.

#### Section 10.3

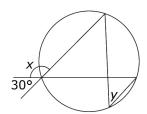
**1.** Find the measure of  $\angle x$  and  $\angle y$ .



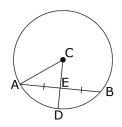
**2.** Find the measure of  $\angle x$  and  $\angle y$ .



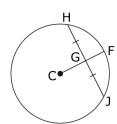
**3.** Find the measure of  $\angle x$  and  $\angle y$ .



**4.** If CE = 6 cm and AB = 16 cm, what is the measure of CD?



**5.** Which lengths are perpendicular to each other?

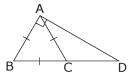


### **Mental Math**

- **6.** An isosceles right triangle has legs measuring 8 cm each. How long is the hypotenuse, to the nearest tenth?
- **7.** A right triangle has a hypotenuse of 25 cm and a leg that measures 20 cm. What is the measure of the second leg?
- **8.** Find the measure of angle x.



**9.** Find the measure of all the missing angles in the triangles.



**10.** Find the measure of each angle in  $\triangle DEF$ .

