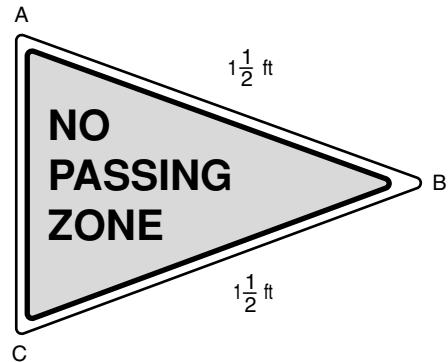
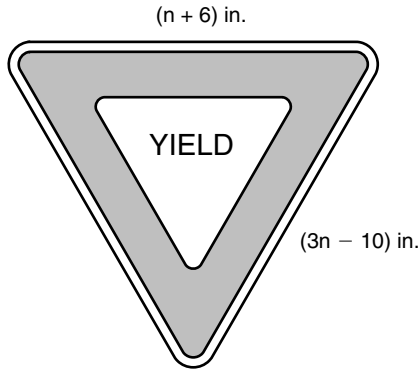


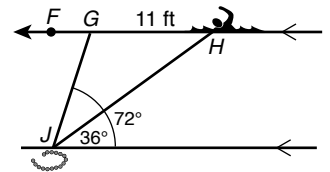
**LESSON**  
**4-8**

**Problem Solving**  
**Isosceles and Equilateral Triangles**



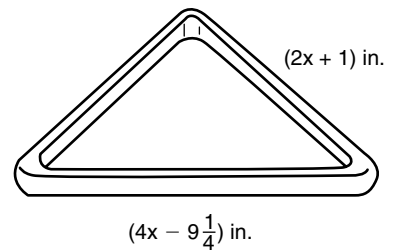
1. A "Yield" sign is an equilateral triangle. What are the lengths of the sides?
2. The measure of  $\angle C$  is  $70^\circ$ . What is the measure of  $\angle B$ ?

3. Samantha is swimming along  $\overrightarrow{HF}$ . When she is at point  $H$ , she sees a necklace straight ahead of her but on the bottom of the pool at point  $J$ . Then she swims 11 more feet to point  $G$ . Use the diagram to find  $GJ$ , the distance Samantha is from the necklace. Explain.



**Choose the best answer.**

4. A billiards triangle is equilateral. What is the perimeter?  
**A**  $5\frac{1}{8}$  in.      **C**  $11\frac{1}{4}$  in.  
**B**  $10\frac{1}{4}$  in.      **D**  $33\frac{3}{4}$  in.



5. A triangular shaped trellis has angles  $R$ ,  $S$ , and  $T$  that measure  $73^\circ$ ,  $73^\circ$ , and  $34^\circ$ , respectively. If  $ST = 4y + 6$  and  $TR = 7y - 21$ , what is the value of  $y$ ?  
**F** 5      **H** 11  
**G** 9      **J** 15

6. Two triangular tiles each have two sides measuring 4 inches. Which is a true statement?

- A** Their corresponding angles are congruent.      **C** The triangles may be congruent.  
**B** The triangles are congruent.      **D** The triangles cannot be congruent.

7. What is the value of  $x$  in the figure?  
**F**  $42^\circ$       **H**  $96^\circ$   
**G**  $90^\circ$       **J**  $106^\circ$

