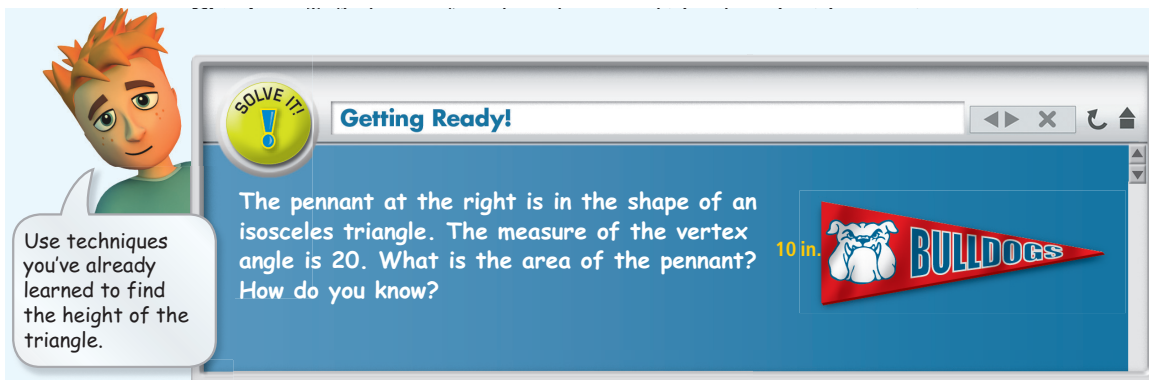


10-5 Solve It!




Use techniques you've already learned to find the height of the triangle.

SOLVE IT!

Getting Ready!

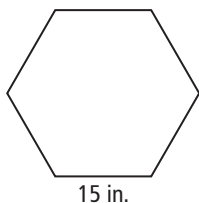
The pennant at the right is in the shape of an isosceles triangle. The measure of the vertex angle is 20° . What is the area of the pennant? How do you know?



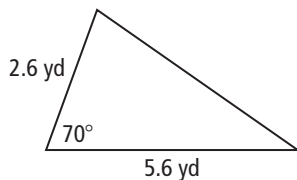
10 in.

10-5 Lesson Quiz

1. What is the area of a regular hexagon with 15 in. sides?



2. **Do you UNDERSTAND?** A regular decagon has sides that are 8 cm long. What is the area of the figure? Round to the nearest whole number if necessary?
3. What is the area of the triangle to the nearest tenth?



Answers

Solve It!

About 141.8 in.^2 ; explanations may vary. Sample: Each base \angle measures 80° . If h is the height of the \triangle , then $\tan 80^\circ = \frac{h}{5}$.

So, $h = 5 \cdot \tan 80^\circ$. $A = \frac{1}{2}$

$bh = \frac{1}{2}(10)(5 \cdot \tan 80^\circ)$.

Lesson Quiz

1. about 585 in.^2
2. about 492 cm^2
3. about 6.8 yd^2