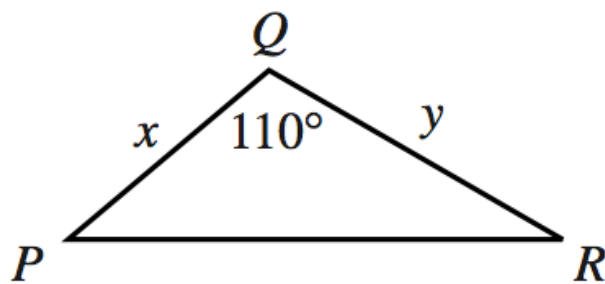
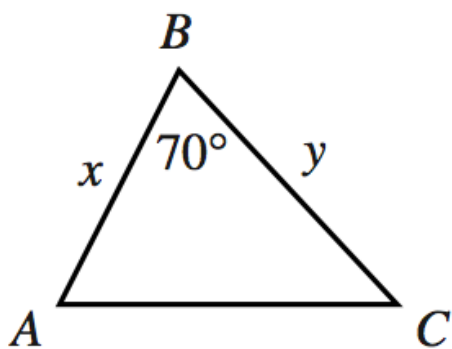




56. Triangles $\triangle ABC$ and $\triangle PQR$ are shown below. The given side lengths are in centimeters. The area of $\triangle ABC$ is 30 square centimeters. What is the area of $\triangle PQR$, in square centimeters?



- F. 15
- G. 19
- H. 25
- J. 30
- K. 33

cannot be determined from the given information

$$x = 100 - (55 + 100) = 45$$

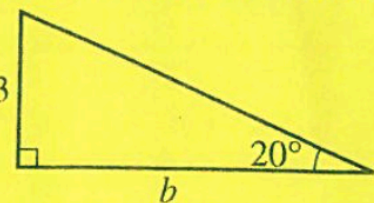
59. In the triangle below, where the 2 given side lengths are expressed in feet, what is the value of b ?

ADVANCED TRIGONOMETRY Cofunction Identities

$$\tan \theta = \cot (90 - \theta)$$

you know $\tan 20^\circ = \frac{3}{b}$ and $b = \frac{3}{\tan 20}$

However this is NOT one of your choices



If $\tan 20^\circ = \cot 70^\circ$ and $\cot \theta = \frac{1}{\tan \theta}$, then

$$\frac{3}{\tan 20} = \frac{3}{\frac{1}{\tan 70}} = 3 \tan 70^\circ$$

- E
A. $3 \cos 20^\circ$
B. $3 \sin 20^\circ$
C. $3 \tan 20^\circ$
D. $3 \sin 70^\circ$
→ E. $3 \tan 70^\circ$