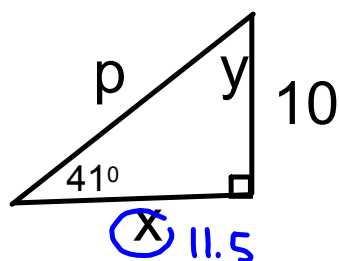


Solve the following triangle.



$$\begin{aligned} y &= 180 - 90 - 41 \\ &= 49^\circ \end{aligned}$$

$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

$$\tan 41^\circ = \frac{10}{x}$$

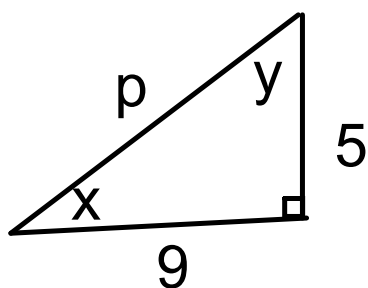
$$\frac{x \tan 41^\circ}{\tan 41^\circ} = \frac{10}{\tan 41^\circ}$$

$$x = 11.5$$

$$\begin{aligned} p^2 &= 10^2 + 11.5^2 \\ &= 100 + 132.25 \\ &= 232.25 \end{aligned}$$

$$\begin{aligned} p &= \sqrt{232.25} \\ &= 15.2 \end{aligned}$$

$$\frac{2}{2}x = 8$$



$$\begin{aligned}
 p^2 &= 9^2 + 5^2 \\
 &= 81 + 25 \\
 &= 106 \\
 p &= \sqrt{106} \\
 &= 10.3
 \end{aligned}$$

$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

$$\tan x = \frac{5}{9}$$

$$\begin{aligned}
 x &= \tan^{-1} \frac{5}{9} \\
 &= 29^\circ
 \end{aligned}$$

$$\begin{aligned}
 y &= 180 - 29 - 90 \\
 &= 61^\circ
 \end{aligned}$$

