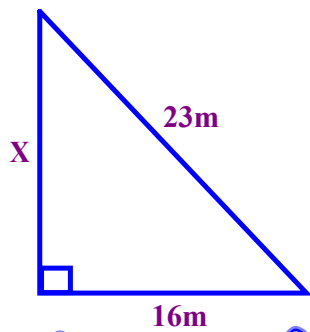


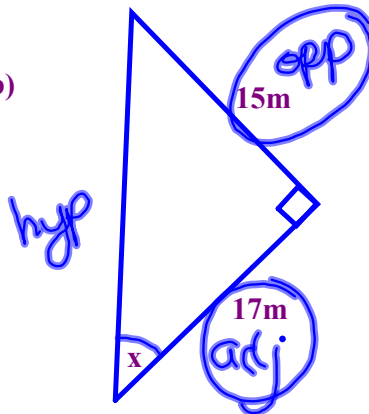
Warm Up Questions

a)



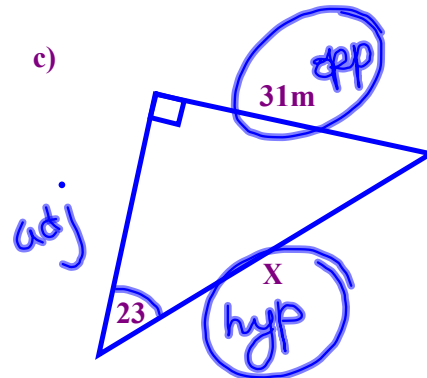
$$\begin{aligned}
 a^2 + b^2 &= h^2 \\
 X^2 + 16^2 &= 23^2 \\
 X^2 + 256 &= 529 \quad -256 \\
 X^2 &= 273 \\
 \sqrt{X^2} &= \sqrt{273} \\
 X &= 16.5
 \end{aligned}$$

b)



$$\begin{aligned}
 \tan \theta &= \frac{o}{a} \\
 \tan \theta &= \frac{15}{17} \\
 \tan \theta &= 0.8824 \\
 \theta &= 41^\circ
 \end{aligned}$$

c)



$$\begin{aligned}
 \sin \theta &= \frac{o}{h} \\
 \sin 23 &= \frac{31}{X} \\
 0.3907 &= \frac{31}{X} \\
 0.3907X &= 31 \\
 \frac{0.3907X}{0.3907} &= \frac{31}{0.3907} \\
 X &= 79.3
 \end{aligned}$$