

$$c) \quad x^2 - 7x + 10 \quad 0^\circ \leq x \leq 360$$

↓

$$\begin{array}{cc} (x-5) & (x-2) \\ x=5 & x=2 \end{array}$$

$$\begin{array}{cc} \tan x = 5 & \tan x = 2 \\ x = \tan^{-1}(5) & x = \tan^{-1}(2) \\ x = 78.7 & x = 63.43 \end{array}$$

$$d) \quad y = \cos^2\left(\frac{20}{5}\right)$$

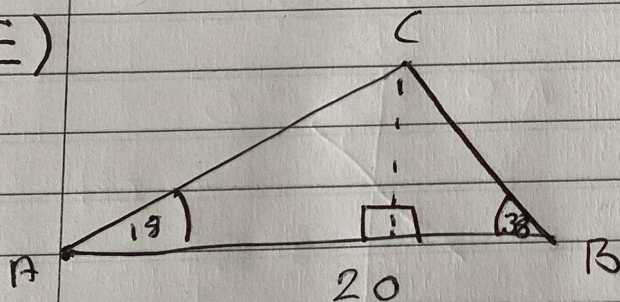
$$\sqrt{y} = \cos\left(\frac{20}{5}\right)$$

$$\cos^{-1}(\sqrt{y}) = \frac{20}{5}$$

$$5 \cdot \cos^{-1}(\sqrt{y}) = 20$$

$$\frac{5}{2} \cdot \cos^{-1}(\sqrt{y}) = 0$$

E)



$$\angle ACB = 124^\circ$$

$$\angle CAB = 18^\circ$$

$$\angle CBA = 38^\circ$$

$$\frac{AC}{\sin 38} = \frac{20}{\sin 124}$$

$$AC = \frac{20 (\sin 38)}{\sin 124} \approx \underline{\underline{14.8 \text{ miles}}}$$