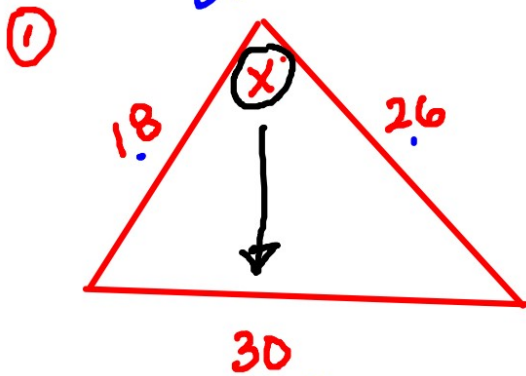


Solve for x:
SSS

DRILL

② Name your favorite movie or T.V show.



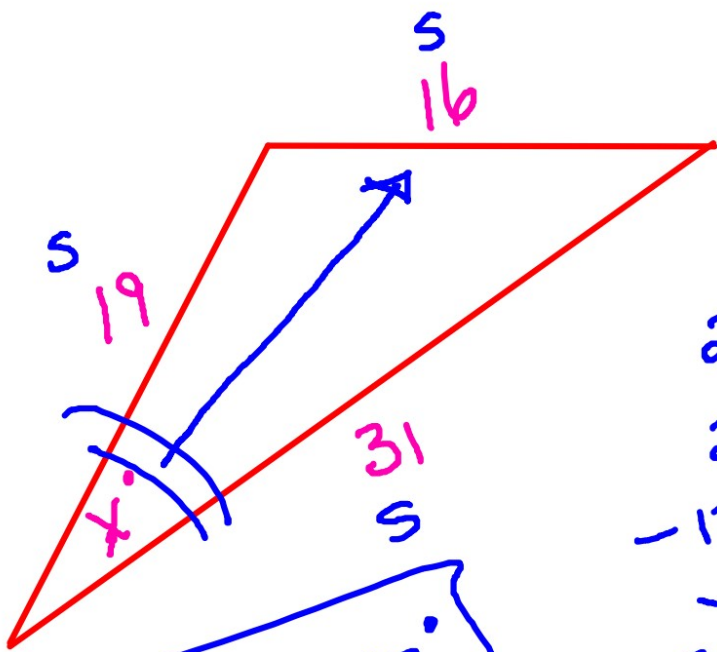
$$a^2 = b^2 + c^2 - 2bc \cos A$$

$$30^2 = 18^2 + 26^2 - 2(18)(26) \cos x$$

$$\frac{30^2 - 18^2 - 26^2}{-2(18)(26)} = \frac{-2(18)(26) \cos x}{-2(18)(26)}$$

$$0.1068376068 \approx \cos x$$

$$x = 83.87^\circ$$



$$a^2 = b^2 + c^2 - 2bc \cos A$$

$$16^2 = 19^2 + 31^2 - 2(19)(31) \cos X$$

$$256 = 361 + 961 - 1178 \cos X$$

$$256 = \cancel{1322} - 1178 \cos X$$

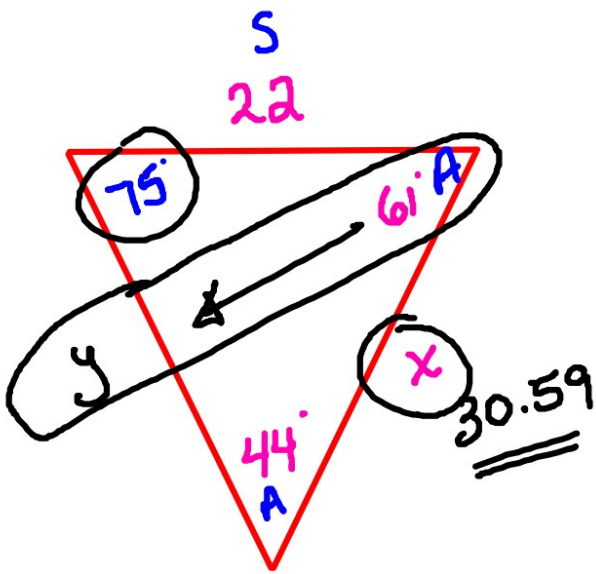
$$-1322 \quad -1322$$

$$\frac{-1066}{-1178} = \frac{-1178 \cos X}{-1178}$$

$$\frac{1066}{1178} = \cos X$$

$$X = \cos^{-1} \left(\frac{1066}{1178} \right)$$

$$X \approx 25.187^\circ$$



$$180 - 61 - 44$$

$$\frac{x}{\sin 75^\circ} = \frac{22}{\sin 44^\circ}$$

or

$$\frac{\sin 75^\circ}{x} = \frac{\sin 44^\circ}{22}$$

$$\frac{22 \sin 75^\circ}{\sin 44^\circ} = \frac{x \cancel{\sin 44^\circ}}{\cancel{\sin 44^\circ}}$$

$$x = 30.59$$