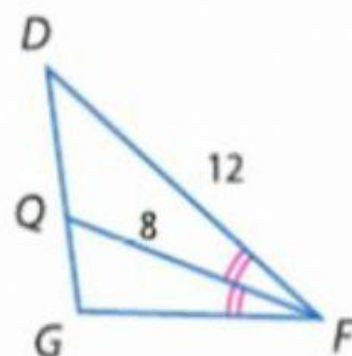
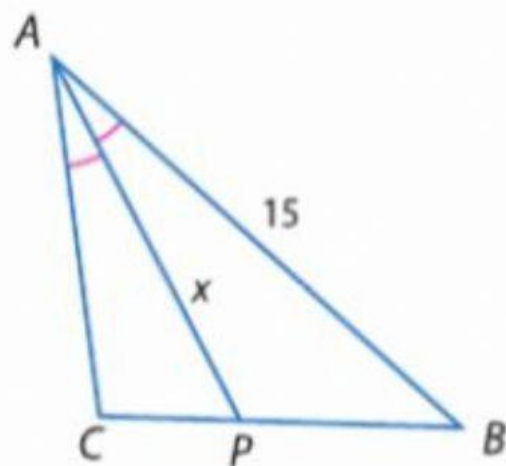


In the figure, $\triangle ABC \sim \triangle FDG$. Find the value of x .



$$\frac{AP}{FQ} = \frac{AB}{FD}$$

$$\frac{x}{8} = \frac{15}{12}$$

$$8 \cdot x = 15 \cdot 12$$

$$8x = 180$$

$$x = 22.5$$