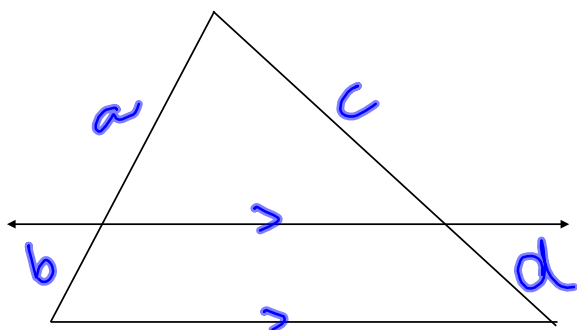


SIDE-SPLITTER THEOREM

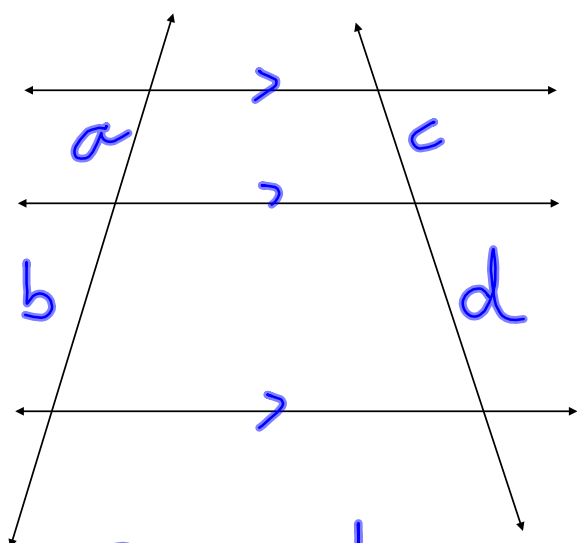


$$\frac{a}{b} \neq \frac{d}{c}$$

$$\frac{a}{b} = \frac{c}{d}$$

$$\frac{a}{c} = \frac{b}{d}$$

Corollary to the Side-Splitter Theorem

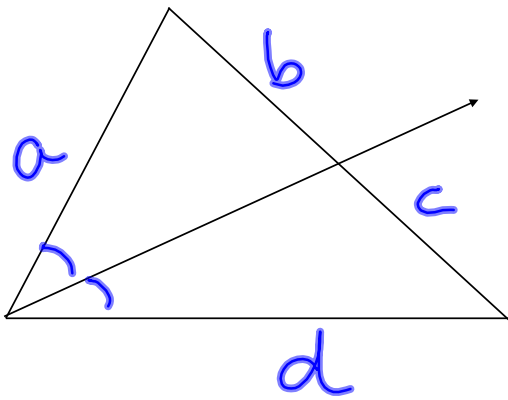


$$\frac{a}{b} = \frac{c}{d}$$

$$\frac{a}{c} = \frac{b}{d}$$

$$\frac{a}{b} \neq \frac{d}{c}$$

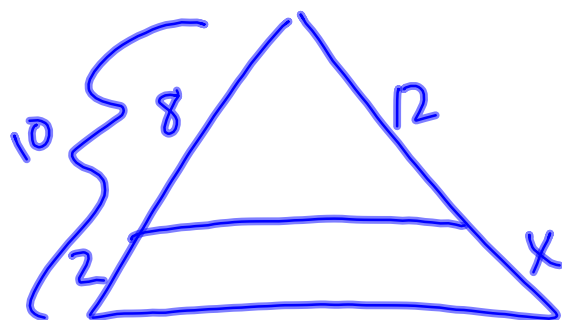
ANGLE BISECTOR THEOREM



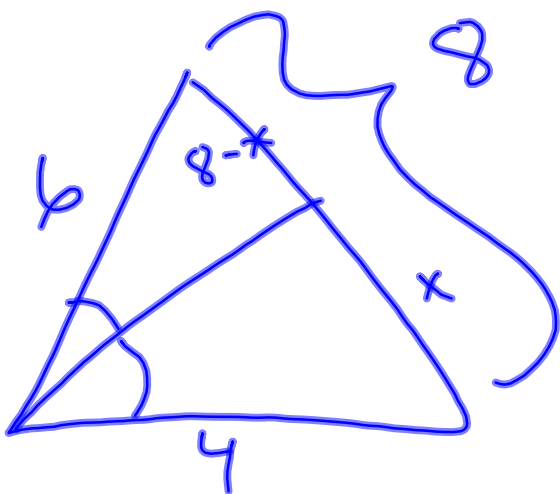
$$\frac{a}{b} = \frac{d}{c}$$

$$\frac{a}{d} = \frac{b}{c}$$

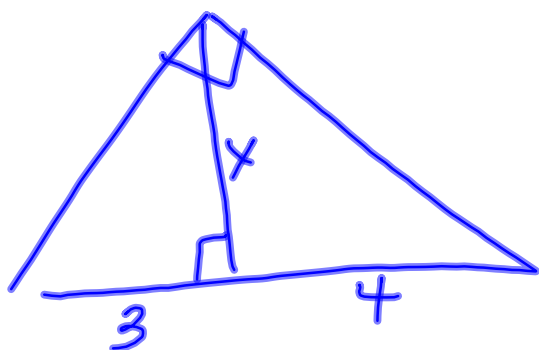
$$\frac{a}{b} \neq \frac{c}{d}$$



$$\frac{8}{2} = \frac{12}{x}$$



$$\frac{6}{8-x} = \frac{4}{x}$$



$$\frac{\text{long}}{\text{short}} = \frac{x}{3} = \frac{4}{x}$$

