1.2. Similar Triangles
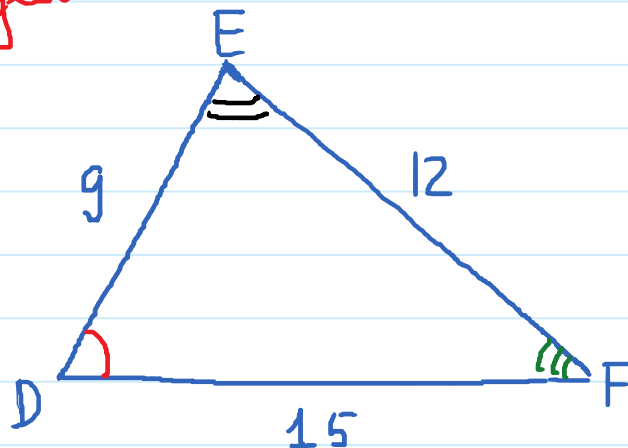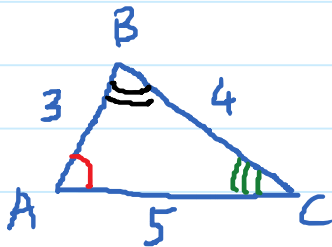
Sum of measures of 3 angles in any triangle is $180°$
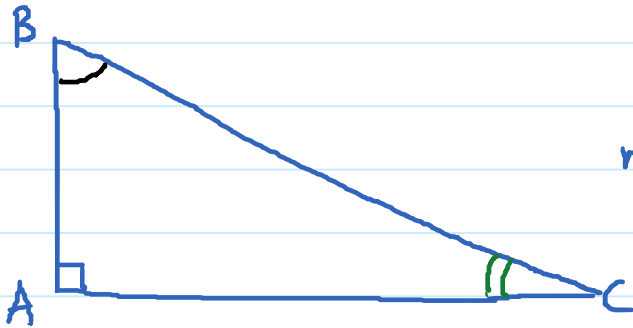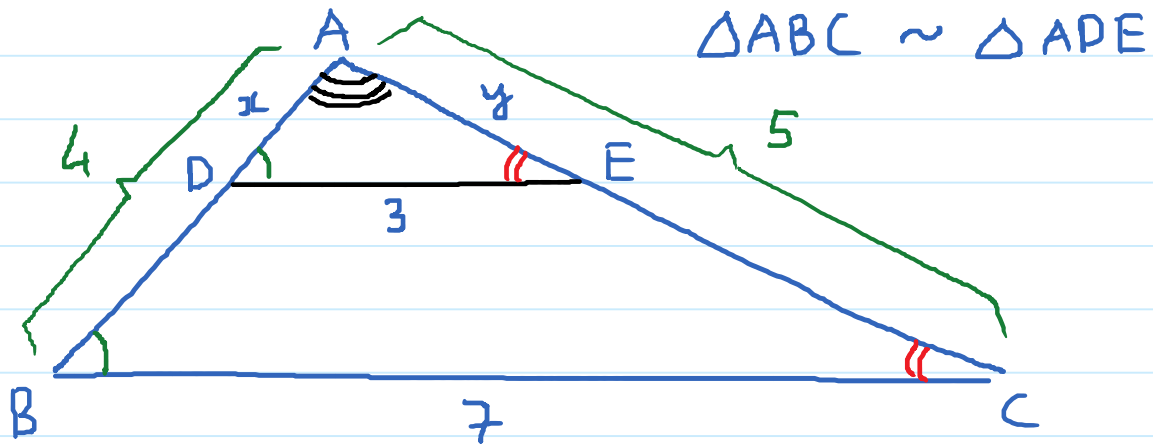
$$m\angle B + m\angle C = 90°$$

Similar Triangles

Important Properties: $\angle A = \angle D$; $\angle B = \angle E$; $\angle C = \angle F$

$$\frac{AB}{DE} = \frac{BC}{EF} = \frac{AC}{DF}$$

$\triangle ABC \sim \triangle ADE$

$$\frac{AD}{AB} = \frac{AE}{AC} = \frac{DE}{BC} \longrightarrow \frac{x}{4} = \frac{y}{5} = \frac{3}{7}$$

$$\frac{x}{4} = \frac{3}{7} \longrightarrow x = \frac{12}{7} \quad ; \quad \frac{y}{5} = \frac{3}{7} \longrightarrow y = \frac{15}{7}$$