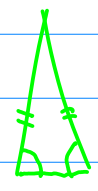
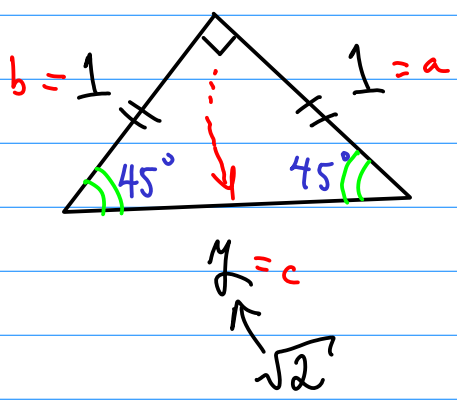


# 9.3: SRT's [Special Rt Δ's] #1

Isosceles  
Rt Δ:



$$a^2 + b^2 = c^2$$

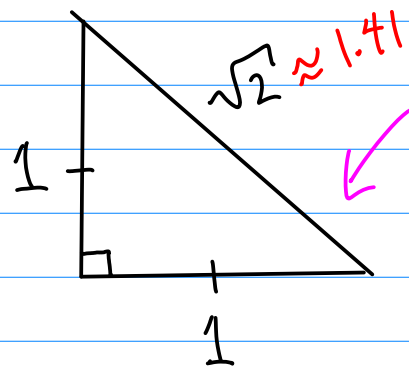
$$1^2 + 1^2 = y^2$$

$$1 + 1 = y^2$$

$$\sqrt{2} = \sqrt{y^2}$$

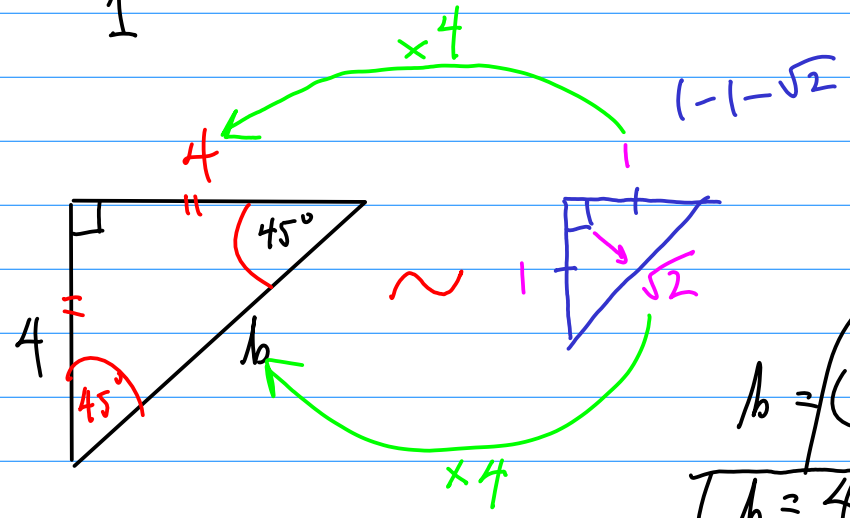
$$\sqrt{2} = y$$

\* 45°-45°-90° SRT:



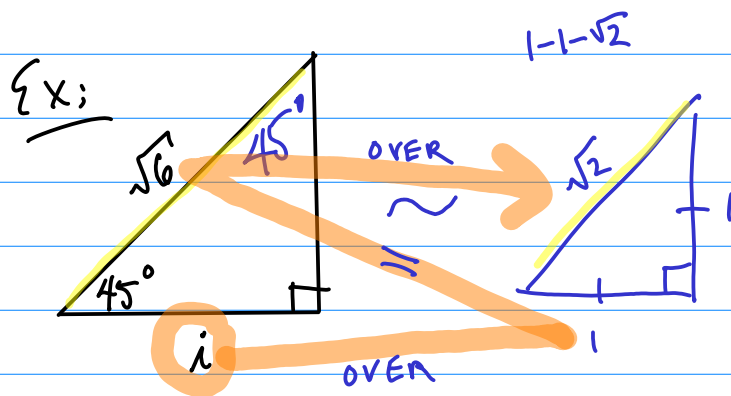
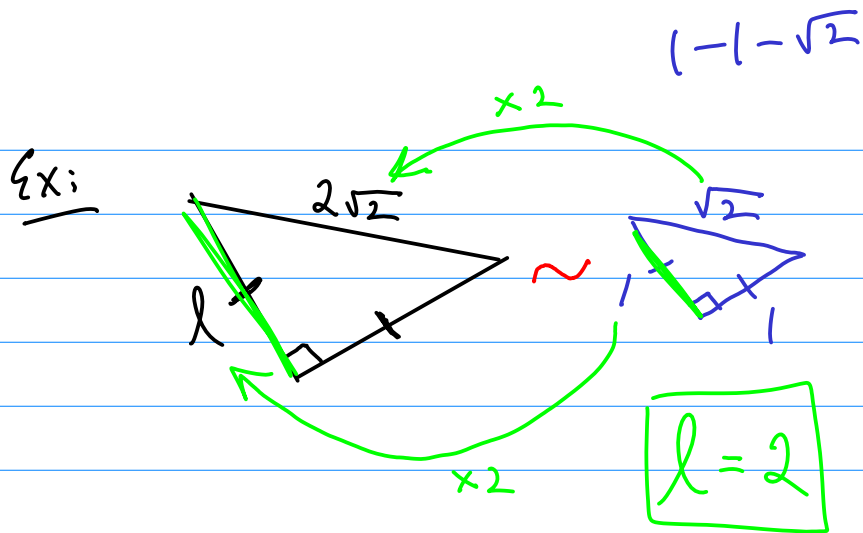
ALL 45°-45°-90°  
Δ's are proportional  
to this one.

Ex:



$$b = (\sqrt{2})(4)$$

$$b = 4\sqrt{2}$$



$$\cancel{i} = \frac{\sqrt{6} \cdot \sqrt{2}}{\sqrt{2} \cdot \sqrt{2}}$$

$$i = \frac{\sqrt{6 \cdot 2}}{2}$$

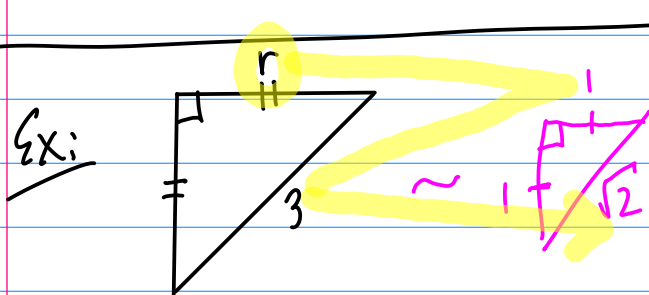
$$i = \frac{\sqrt{12}}{2}$$

$$i = \frac{\sqrt{4 \cdot 3}}{2}$$

$$i = \frac{\sqrt{4} \sqrt{3}}{2}$$

$$i = \frac{\cancel{2} \sqrt{3}}{\cancel{2}}$$

$$i = \sqrt{3}$$



$$\cancel{r} = \frac{3 \sqrt{2}}{\sqrt{2} \cdot \sqrt{2}}$$

$$r = \frac{3 \sqrt{2}}{2}$$