

Warm-up 1/26/17

If the length of the hypotenuse of a right triangle is 29, and one leg is 21, find the length of the other leg.

$$21^2 + x^2 = 29^2$$

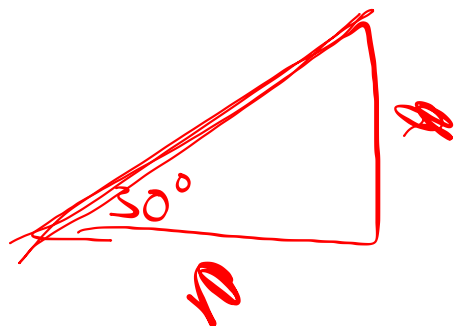
$$441 + x^2 = 841$$

$$x^2 = 400$$

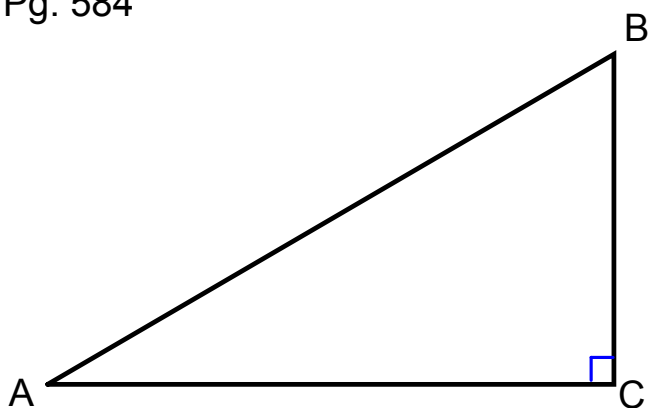
$$x = 20$$

Pg. 580-583

$$\frac{9}{9\sqrt{3}} = \frac{1}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{\sqrt{3}}{3}$$



Pg. 584



$$\tan A = \frac{\text{opp.}}{\text{adj.}} = \frac{BC}{AC}$$

opposite  
adjacent

P. 587

$$\tan 4 = \frac{20}{x}$$

$$x(\tan 4) = 20$$

$$x = \frac{20}{\tan 4} \approx 286$$

$$\tan 4 = \frac{x}{100}$$

$$100(\tan 4) = x$$

$$7 \approx x$$

Pg. 589-591

4.

1.

$$\tan A = \frac{15}{10}$$

$$A = \tan^{-1}\left(\frac{15}{10}\right) \approx 56.3^\circ$$