Warm-up 1/27/17

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

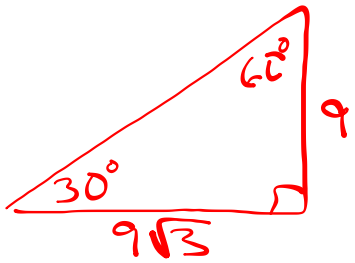
$$21^2 + b^2 = 29^2$$

$$441 + b^2 = 841$$

$$b^2 = 400$$

$$b = 20$$

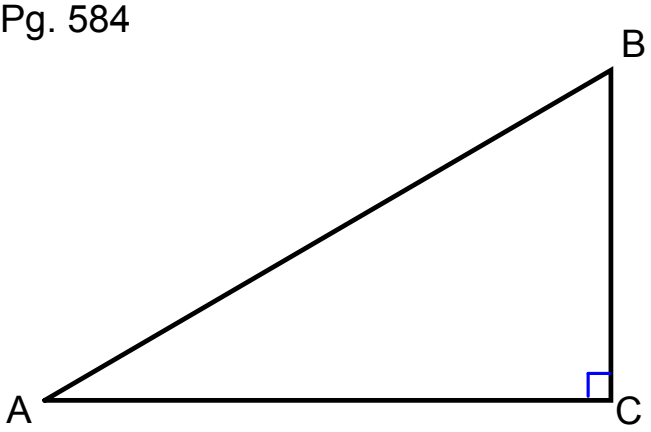
Pg. 580-583



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

$$\frac{24}{24\sqrt{3}} = \frac{1}{\sqrt{3}}$$

Pg. 584



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

Pg. 587

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

$x(\tan 4) = 20$

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

$x \approx 286$

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

$100(\tan 4) = x$

$7 \approx x$

Pg. 589-591

4.

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

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