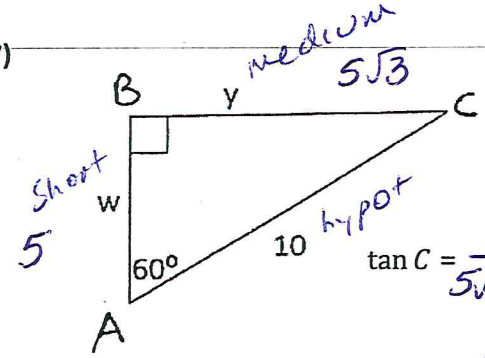
17)



$w = 10/2 = 5$

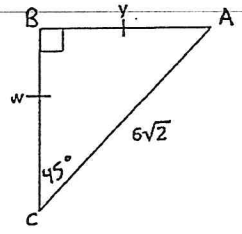
$y = 5\sqrt{3}$

$\tan C = \frac{5}{5\sqrt{3}} = \frac{1}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{\sqrt{3}}{3}$

$\sin A = \frac{5\sqrt{3}}{10} = \frac{\sqrt{3}}{2}$

$\cos C = \frac{5\sqrt{3}}{10} = \frac{\sqrt{3}}{2}$

18)



$w = \frac{6\sqrt{2}}{\sqrt{2}} = 6$

$y = 6$

$\cos A = \frac{6}{6\sqrt{2}} = \frac{1}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{2}}{2}$

$\tan A = \frac{6}{6} = 1$

$\cos C = \frac{6}{6\sqrt{2}} = \frac{1}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{2}}{2}$

DIRECTIONS: (a) Sketch each angle in standard position.

(b) Determine the reference angle.

(c) Sketch the reference triangle and correctly label each side and angle

(d) Find the *exact* value for the sine, cosine, and tangent of the original angle. Leave no $\sqrt{}$'s in denominator.

19) 210°

20) 300°

See (next page)

21) 135°

22) 30°

23) $\frac{5\pi}{4}$

24) $\frac{2\pi}{3}$