

Warm Up 2/14

$$\textcircled{1} \sin(\arccos(-\frac{\sqrt{3}}{2}))$$

$$\sin(\frac{5\pi}{6})$$

$$\frac{1}{2}$$

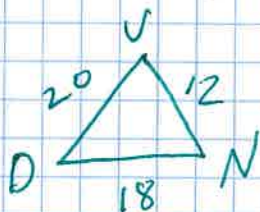
$$\textcircled{2} \tan(\arcsin(-\frac{1}{2}))$$

$$\tan(-\frac{\pi}{6})$$

$$-\frac{\sqrt{3}}{3}$$

⑤ Given $\triangle DUN$

$d = 12$ ft $u = 18$ ft $n = 20$ ft
Find largest \angle



$$\cos N = \frac{18^2 + 12^2 - 20^2}{2(18)(12)}$$

$$N = \cos^{-1}\left(\frac{68}{432}\right)$$

$$N = 80.944^\circ$$

$$\textcircled{2} \cos^{-1}\left(\cos\left(\frac{7\pi}{4}\right)\right)$$

$$\cos^{-1}\left(\frac{\sqrt{2}}{2}\right) = \frac{\pi}{4}$$

$$\textcircled{4} \cos\left(\sin^{-1}\left(\frac{\sqrt{3}}{2}\right) + \cos^{-1}\left(-\frac{1}{2}\right)\right)$$

$$\cos\left(\frac{\pi}{3} + \frac{2\pi}{3}\right)$$

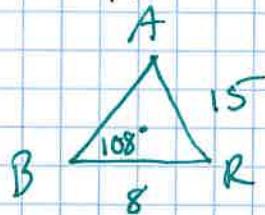
$$\cos(\pi) = -1$$

⑥ Given $\triangle BAR$

$B = 108^\circ$ $b = 15$ in

$a = 8$ in

Find A



$$\frac{\sin A}{8} = \frac{\sin 108}{15}$$

$$\sin A = \frac{8 \sin 108}{15}$$

$$A = \sin^{-1}\left(\frac{8 \sin 108}{15}\right)$$

$$A = 30.480^\circ$$