

Quiz on solving equations Fri. Feb 3; Test #4 - Wed. Feb 8

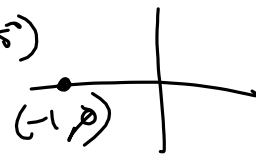
Due Tues. 2/7:

- 7.1 #7-21 odd
- 7.2 #9-19 odd
- 7.2 #25-29 odd

solving triangles with Law of Sines
 solving triangles with Law of Cosines
 area

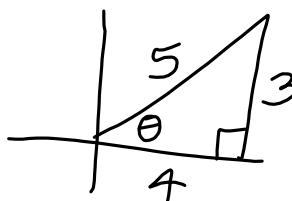
17. Simplify. $\cos 125^\circ \cos 55^\circ - \sin 125^\circ \sin 55^\circ = \cos(125^\circ + 55^\circ)$
 $= \cos 180^\circ$

-1



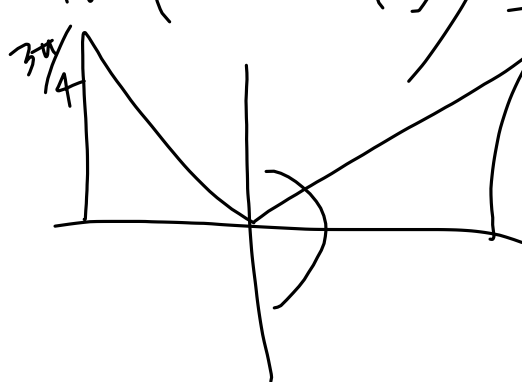
18. Evaluate. $\sin[\cos^{-1}(\frac{4}{5})]$

$\frac{3}{5}$



$\sin(\tan^{-1}(-\frac{3}{4})) = -\frac{3}{5}$

$\sin^{-1}(\sin \frac{3\pi}{4}) = \frac{\pi}{4}$ If θ is in restricted domain of f ,
 $f^{-1}(f(\theta)) = \theta$



$\frac{2}{3} \mid \frac{1}{4}$

find all the x !

$$2\sin x \cos x + 2\sin x - \cos x - 1 = 0$$

$$2\sin x (\cos x + 1) - 1 (\cos x + 1) = 0$$

$$(\cos x + 1)(2\sin x - 1) = 0$$

$$\cos x = -1$$

$$x = \pi + 2\pi k$$

$$\sin x = \frac{1}{2}$$

$$x = \frac{\pi}{6} + 2\pi k$$

$$x = \frac{5\pi}{6} + 2\pi k$$

$$\cos 2x = -1$$

$$2x = \pi + 2\pi k$$

$$x = \frac{\pi}{2} + \pi k$$