HW #26 p. 227

1. $\sin\theta = \frac{4\sqrt{2}}{9}$ $\quad \csc\theta = \frac{9\sqrt{2}}{8}$

$\cos\theta = \frac{7}{9}$ $\quad \sec\theta = \frac{9}{7}$

$\tan\theta = \frac{4\sqrt{2}}{7}$ $\quad \cot\theta = \frac{7\sqrt{2}}{8}$

3. $\sin\theta = \frac{9}{\sqrt{97}} = \frac{9\sqrt{97}}{97}$ $\quad \csc\theta = \frac{\sqrt{97}}{9}$

$\cos\theta = \frac{4}{\sqrt{97}} = \frac{4\sqrt{97}}{97}$ $\quad \sec\theta = \frac{\sqrt{97}}{4}$

$\tan\theta = \frac{9}{4}$ $\quad \cot\theta = \frac{4}{9}$

5. $\sin\theta = \frac{\sqrt{165}}{29}$ $\quad \csc\theta = \frac{29}{\sqrt{165}} = \frac{29\sqrt{165}}{165}$

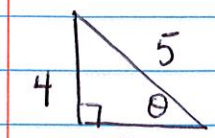
$\cos\theta = \frac{26}{29}$ $\quad \sec\theta = \frac{29}{26}$

$\tan\theta = \frac{\sqrt{165}}{26}$ $\quad \cot\theta = \frac{26}{\sqrt{165}} = \frac{26\sqrt{165}}{165}$

7. $\sin\theta = \frac{3}{5}$ $\quad \csc\theta = \frac{5}{3}$

$\cos\theta = \frac{4}{5}$ $\quad \sec\theta = \frac{5}{4}$

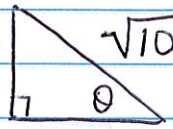
$\tan\theta = \frac{3}{4}$ $\quad \cot\theta = \frac{4}{3}$

9. 

$\cos\theta = \frac{3}{5}$ $\quad \csc\theta = \frac{5}{4}$

$\sec\theta = \frac{5}{3}$

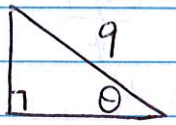
$\tan\theta = \frac{4}{3}$ $\quad \cot\theta = \frac{3}{4}$

11. 

$\sin\theta = \frac{3}{\sqrt{10}} = \frac{3\sqrt{10}}{10}$ $\quad \csc\theta = \frac{\sqrt{10}}{3}$

$\cos\theta = \frac{1}{\sqrt{10}} = \frac{\sqrt{10}}{10}$ $\quad \sec\theta = \sqrt{10}$

$\cot\theta = \frac{1}{3}$

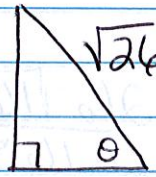
13. 

$\sqrt{56} = 2\sqrt{14}$

$\sin\theta = \frac{2\sqrt{14}}{9}$ $\quad \csc\theta = \frac{9}{2\sqrt{14}} = \frac{9\sqrt{14}}{28}$

$\sec\theta = \frac{9}{5}$

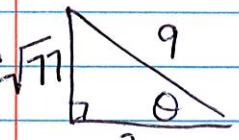
$\tan\theta = \frac{2\sqrt{14}}{5}$ $\quad \cot\theta = \frac{5}{2\sqrt{14}} = \frac{5\sqrt{14}}{28}$

15. 

$\sin\theta = \frac{1}{\sqrt{26}} = \frac{\sqrt{26}}{26}$ $\quad \csc\theta = \sqrt{26}$

$\cos\theta = \frac{5}{\sqrt{26}} = \frac{5\sqrt{26}}{26}$ $\quad \sec\theta = \frac{\sqrt{26}}{5}$

$\tan\theta = \frac{1}{5}$ $\quad \cot\theta =$

17. 

$\sin\theta = \frac{\sqrt{77}}{9}$ $\quad \csc\theta = \frac{9}{\sqrt{77}} = \frac{9\sqrt{77}}{77}$

$\cos\theta = \frac{2}{9}$

$\tan\theta = \frac{\sqrt{77}}{2}$ $\quad \cot\theta = \frac{2}{\sqrt{77}} = \frac{2\sqrt{77}}{77}$

HW #26

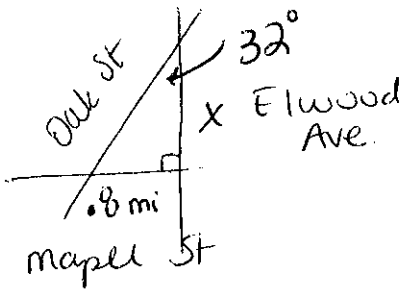
19. $\sin 17° = \frac{x}{11}$ $\boxed{x = 3.2}$

21. $\cos 35° = \frac{x}{5}$ $\boxed{x = 4.1}$

23. $\sin 19° = \frac{14}{x}$ $\boxed{x = 43.0}$

27. $\tan 35° = \frac{x}{25}$ $\boxed{x = 17.5 \text{ ft}}$

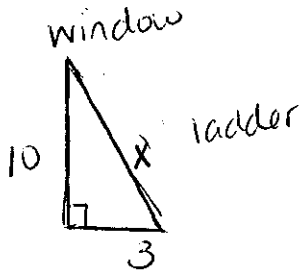
29. a.



b. $\tan 32° = \frac{0.8}{x}$

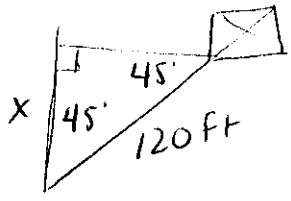
$\boxed{x = 1.3 \text{ miles}}$

103.



G.

105.



G.