Name: _____

Place Your Bets

Work Space

(1) Solve. $0 \leq \theta < 2\pi$ $\sin\left(\frac{\pi}{2} - \theta\right) = \sec\theta$

Wager: 500, 100

Total: 600

Work Space

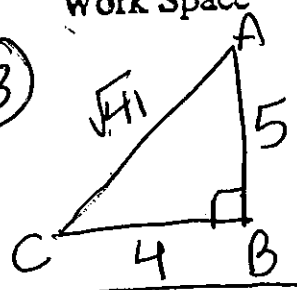
(2) Find the area of $\triangle ABC$ if $m\angle B = 28°$ and $a = 18.8m$ and $c = 20.8m$ Round to nearest tenth.

Wager: 100

Total: 700

Work Space

(3)



$\sin A =$

$\sec A =$

$\cot C =$

Wager: 200

Total: 900

Work Space

(4) $\triangle DEF$ is a right $\triangle$. $\angle F$ is the right $\angle$. $e = 6$ $f = 10$ $d =$ _____ $\angle E =$ _____

Wager: 300

Total: 1200

Work Space round to whole #

(5) $\triangle GHI$ $m\angle G = 96°$, $h = 8$, $i = 12$ Find $m\angle I$. use Law of Cosines. nearest tenth.

Wager: 200

Total:

Work Space

Wager:

Total:

Ch. 14 Place Your Bets Review

① $\sin\left(\frac{\pi}{2}-\theta\right)=\sec\theta$

$\cos\theta=\frac{1}{\sec\theta}$

$\sqrt{\cos^2\theta}=\sqrt{1}$

$\cos\theta=\pm 1$

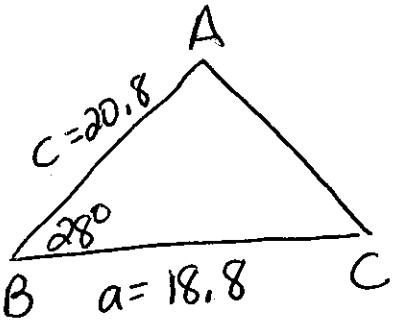
$\theta=0,\pi$

② $A=\frac{1}{2}ac\sin B$

mode: degrees

$=\frac{1}{2}(18.8)(20.8)\sin 28^\circ$

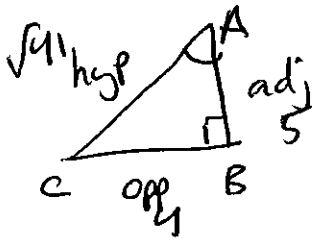
$\approx 91.8\ m^2$

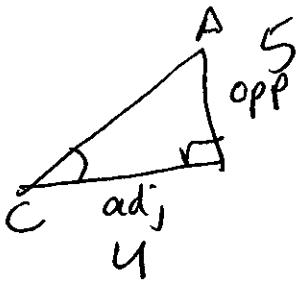


③ $\sin A=\frac{4}{\sqrt{41}}\cdot\frac{\sqrt{41}}{\sqrt{41}}=\frac{4\sqrt{41}}{41}$ (O/H)

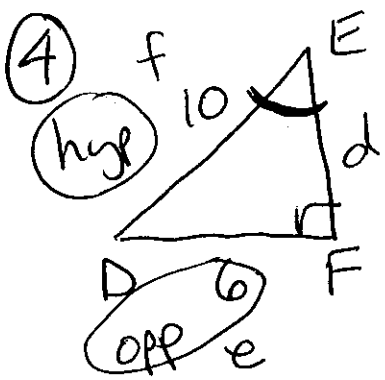
$\sec A=\frac{\sqrt{41}}{5}$ (H/A)

$\cot C=\frac{4}{5}$ (A/O)





④



$6^2+d^2=10^2$

$36+d^2=100$

$-36\quad -36$

$d^2=64$

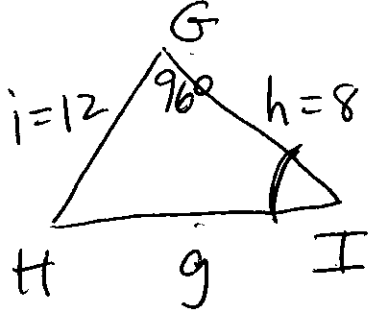
$d=8$

$m\angle E=\sin^{-1}\left(\frac{6}{10}\right)$

$=36.869$

$\approx 37^\circ$

⑤



$g^2 = i^2 + h^2 - 2ih\cos G$

$12^2 + 8^2 - 2(12)(8)\cos 96^\circ$

$\sqrt{g^2} = \sqrt{228.069}$

$g = 15.1$

$\frac{15.1}{\sin 96^\circ} = \frac{12}{\sin I}$

$\sin I = .7903$

$I = \sin^{-1}(.7903)$

$I = 52.2^\circ$

HW: p. 827-829

(8-15, 19-21, 22, 23, 25, 31, 33

34, 38, 39)