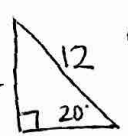

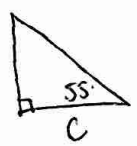
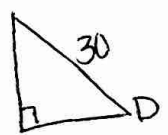


HW123

2. a)  $a = 12 \sin 20$
 $a = 4.1$

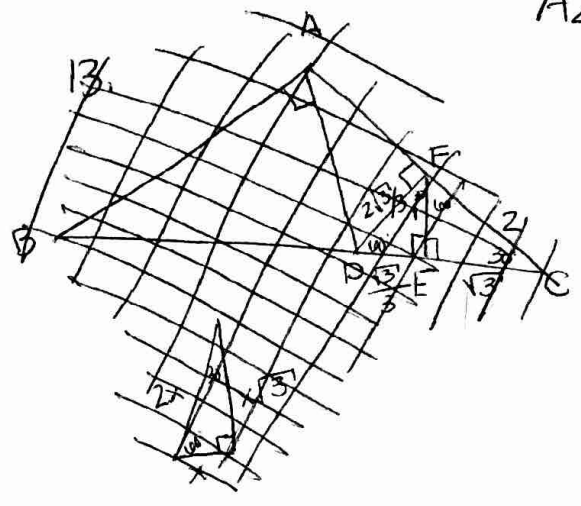
b)  $b = \frac{15}{\cos 80}$
 $b = 2.6$

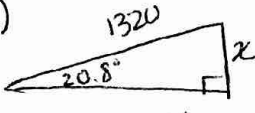
c)  $1.43 = \frac{c+4}{c}$
 $1.43c = c+4$
 $0.43c = 4$
 $c = 9.3$

d)  $\sin^{-1}(\frac{17}{30}) = D$
 $34.5^\circ = D$

4. b) $\cos B = \frac{7.3}{8.4}$
 $\cos^{-1}(7.3/8.4) = B$
 $29.7^\circ = B$

c) $\tan C = \frac{12}{60}$
 $\tan^{-1}(12/60) = C$
 $11.3^\circ = C$



5. a)  $\sin 20.8 = \frac{x}{1320}$
 $x = 468.7 \text{ ft}$

3. a) $\cos 32 = \frac{14.7}{a}$
 $a = \frac{14.7}{\cos 32}$
 $a = 17.3$

b) $\tan 47.2 = \frac{24.6}{b}$
 $b = \frac{24.6}{\tan 47.2}$
 $b = 22.8$

c) $\sin 47 = \frac{58}{c}$
 $c = \frac{58}{\sin 47}$
 $c = 79.3 \text{ ft}$

4) $\sin A = \frac{36}{125}$
 $\sin^{-1}(36/125) = A$
 $A = 16.7^\circ$

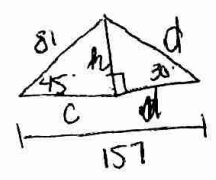
7. a) $\sin 20 = \frac{\overline{BD}}{75}$
 $\overline{BD} = 25.7 \text{ cm}$

b) $\frac{1}{2} (90)(25.7) = A$
 $A = 1156.5 \text{ cm}^2$

c) $\cos 20 = \frac{\overline{AD}}{75}$
 $\overline{AD} = 70.5 \text{ cm}$
 $\overline{DC} = 19.5 \text{ cm}$

d) $\tan C = \frac{25.7}{19.5}$
 $C = 52.8^\circ$

8. $h = 81 \cdot \sin 45$
 $h = 57.3 \text{ ft}$
 $c = 81 \cdot \cos 45$
 $c = 57.3$
 $d = 99.7$



$\sin 30 = \frac{57.3}{d}$
 $d = \frac{57.3}{\sin 30}$
 $d = 114.6$

$A = \frac{1}{2} (157)(57.3)$
 $A = 4498.05 \text{ ft}^2$
 $P = 81 + 157 + 114.6$
 $P = 352.6 \text{ ft}$