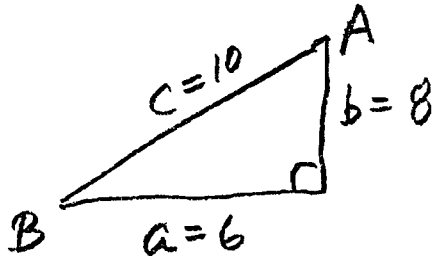


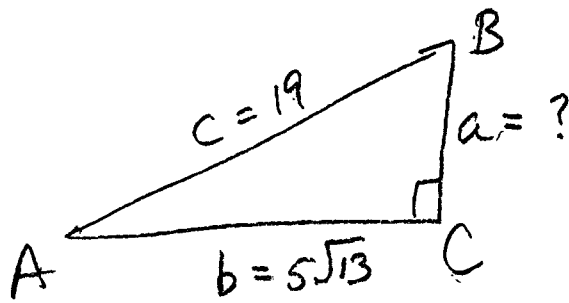
Worksheet Practice

① $\cot A$ if $c=10$ $b=8$



$$\cot A = \frac{a}{b} = \frac{8}{6} = \frac{4}{3}$$

⑨ $\csc A$, $b=5\sqrt{13}$, $c=19$



$$a^2 = 19^2 - (25)(13)$$

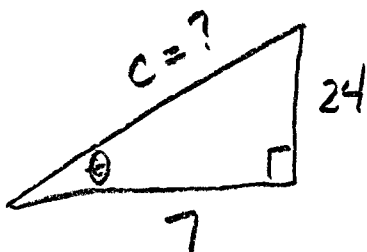
$$a^2 = 361 - 325$$

$$a^2 = 36$$

$$a = 6$$

$$\therefore \csc A = \frac{H}{O} = \frac{19}{6}$$

(13) $\cos \theta$ if $\tan \theta = \frac{24}{7}$



$$c^2 = 24^2 + 7^2$$

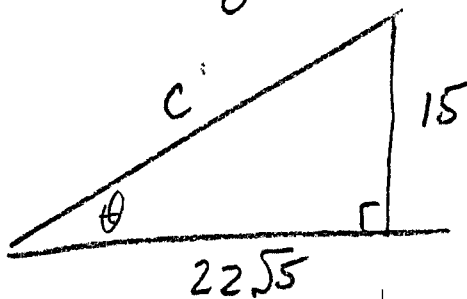
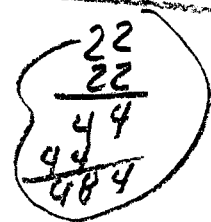
$$c^2 = 576 + 49$$

$$c^2 = 625$$

$$c = 25$$

$\therefore \cos \theta = \frac{7}{25}$

(14) $\sec \theta$ if $\cot \theta = \frac{22\sqrt{5}}{15}$



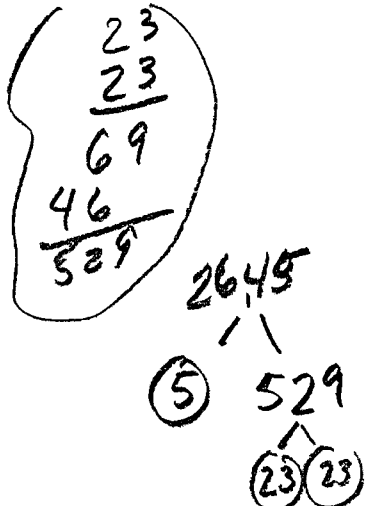
$$c^2 = 15^2 + (22\sqrt{5})^2$$

$$c^2 = 225 + (484)(5)$$

$$c^2 = 225 + 2420$$

$$c^2 = 2645$$

$$c = \sqrt{2645}$$



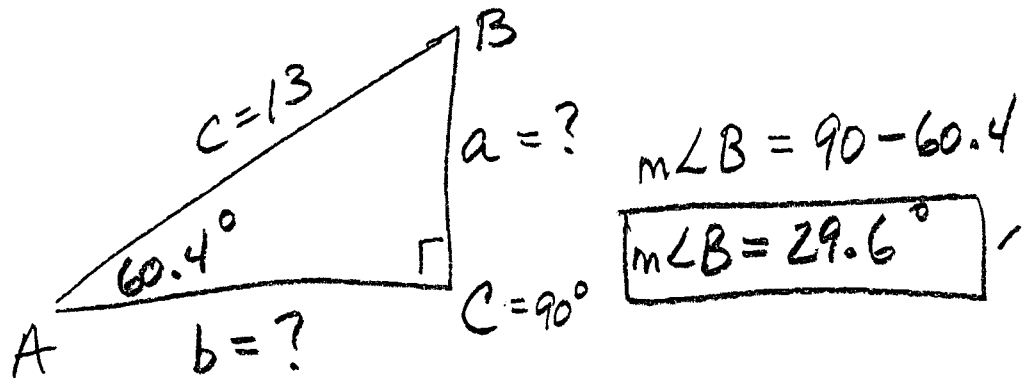
$\therefore \sec \theta = \frac{\sqrt{2645}}{22\sqrt{5}}$

$$= \frac{23\sqrt{5}}{22\sqrt{5}} = \frac{23}{22} = \sec \theta$$

$$\textcircled{33} \quad \sin z = 0.9511$$

$$\boxed{\sin^{-1}(0.9511) = 72^\circ}$$

$$\textcircled{39} \quad m\angle A = 60.4^\circ \quad c = 13$$



$$\sin 60.4^\circ = \frac{a}{13} \quad \therefore a = 13(.8695)$$

$$a = 11.303$$

$$\boxed{a = 11.3}$$

$$\cos 60.4 = \frac{b}{13}$$

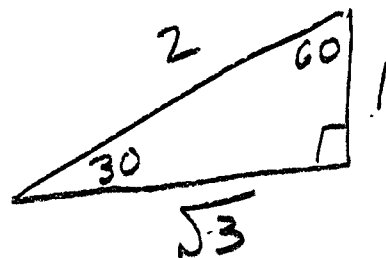
$$\therefore b = 13(.4939)$$

$$b = 6.421$$

$$\boxed{b = 6.4}$$

Solve for $0 \leq \theta \leq 180$, EXACT

(59) $\tan \theta = \sqrt{3}$



Since $\tan 60^\circ = \frac{\sqrt{3}}{1}$

$\theta = 60^\circ$

$\theta = \{60^\circ\}$

