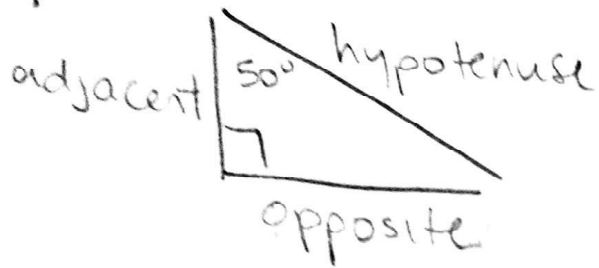


Chapter 2 Review

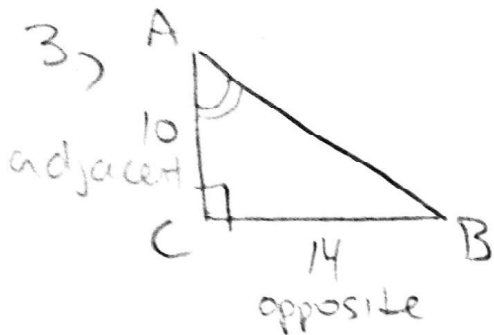
1.)



$$2.) \tan A = \frac{3}{4}$$

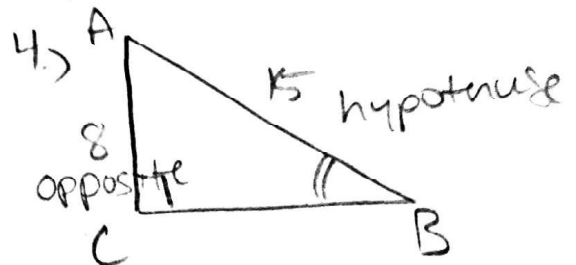
$$\cos A = \frac{4}{5}$$

$$\sin B = \frac{4}{5}$$



$$\tan A = \frac{14}{10}$$

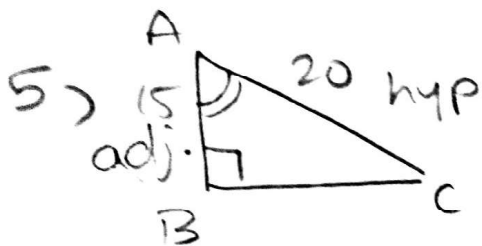
$$A = \tan^{-1}\left(\frac{14}{10}\right) = \underline{\underline{43^\circ}}$$



$$\sin B = \frac{8}{15}$$

$$B = \sin^{-1}\left(\frac{8}{15}\right)$$

$$= \underline{\underline{32^\circ}}$$

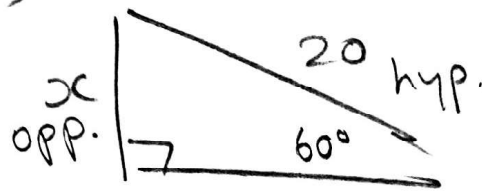


$$\cos A = \frac{15}{20}$$

$$A = \cos^{-1}\left(\frac{15}{20}\right)$$

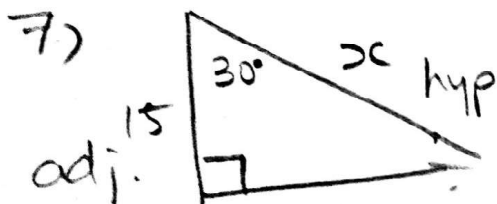
$$= \underline{\underline{41^\circ}}$$

6.)



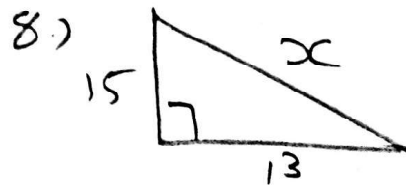
$$\sin 60 = \frac{x}{20}$$

$$x = 20 \sin 60 = \underline{\underline{17.3}}$$



$$\cos 30 = \frac{15}{x}$$

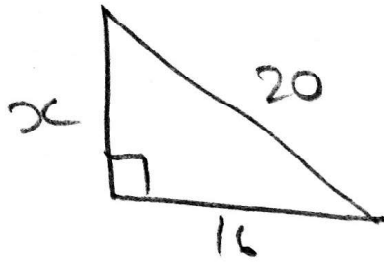
$$x = \frac{15}{\cos 30} = \underline{\underline{17.3}}$$



$$x^2 = 15^2 + 13^2$$

$$\Rightarrow x = \underline{\underline{19.8}}$$

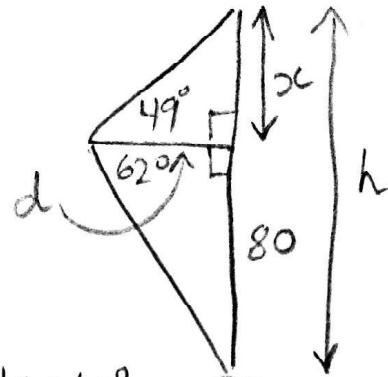
9.)



$$20^2 = x^2 + 16^2$$

$$\Rightarrow x = \underline{\underline{12}}$$

10.)



$$\tan 62^\circ = \frac{80}{d}$$

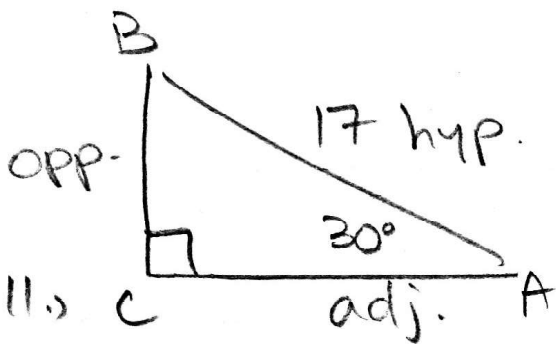
$$d = \frac{80}{\tan 62} = 42.5$$

$$\tan 49^\circ = \frac{x}{42.5}$$

$$x = 42.5 \tan 49$$

$$= 48.9$$

$$\Rightarrow h = 48.9 + 80 = \underline{\underline{128.9}}$$



11.)

$$\angle B = 60^\circ$$

$$BC = 8.5$$

$$AC = 14.7$$

$$\sin 30^\circ = \frac{BC}{17}$$

$$BC = 17 \sin 30$$

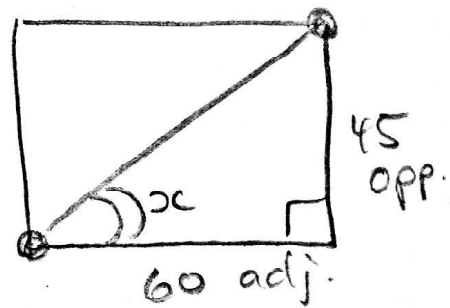
$$= 8.5$$

$$\cos 30^\circ = \frac{AC}{17}$$

$$AC = 17 \cos 30$$

$$= 14.7$$

12.)

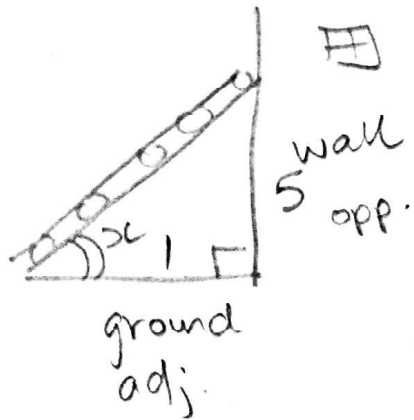


$$\tan x = \frac{45}{60}$$

$$x = \tan^{-1} \left(\frac{45}{60} \right)$$

$$= 37^\circ$$

13

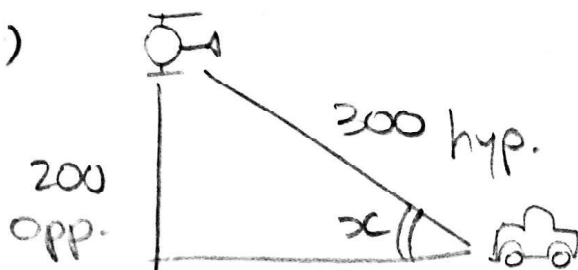


$$\tan x = \frac{5}{1}$$

$$x = \tan^{-1}(5)$$

$$= \underline{\underline{79^\circ}}$$

14,

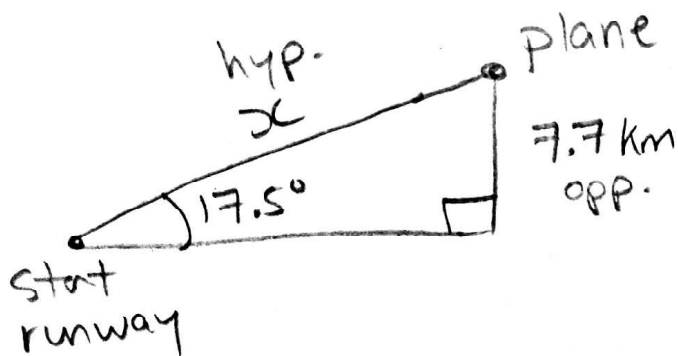


$$\sin x = \frac{200}{300}$$

$$x = \sin^{-1}\left(\frac{2}{3}\right)$$

$$= \underline{\underline{42^\circ}}$$

15,



$$\sin 17.5^\circ = \frac{7.7}{x}$$

$$x = \frac{7.7}{\sin 17.5}$$

$$= \underline{\underline{25.6 \text{ km}}}$$