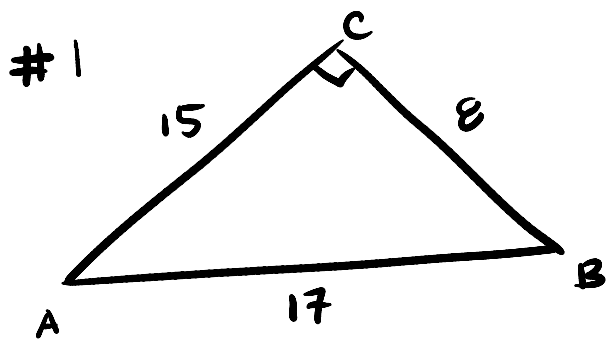


Sec 9.9

pgs. 420 - 422

#2, 3, 5, 7, 9, 10, 11, 14, 16, 17, 18, 22



a. $\frac{8}{17}$

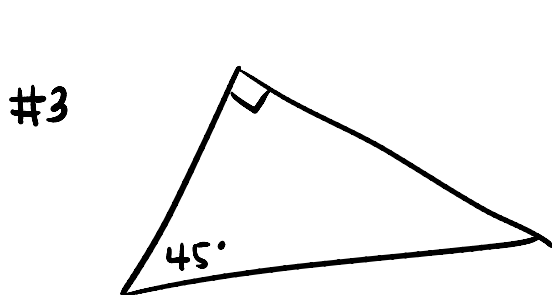
d. $\frac{15}{17}$

b. $\frac{15}{17}$

e. $\frac{8}{17}$

c. $\frac{8}{15}$

f. $\frac{15}{8}$

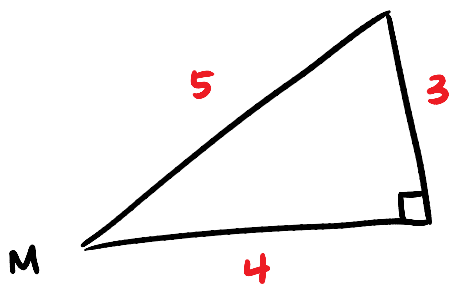


a. $\frac{\sqrt{2}}{2}$

b. $\frac{\sqrt{2}}{2}$

c. 1

#5 If $\tan M = \frac{3}{4}$, find $\cos M$

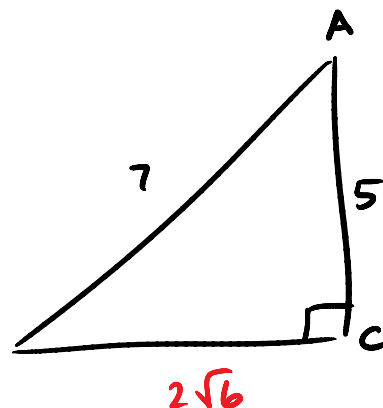


$\cos M = \frac{4}{5}$

#7 Find. a. BC $2\sqrt{6}$

b. $\sin A = \frac{2\sqrt{6}}{7}$

c. $\tan B = \frac{5}{2\sqrt{6}} \cdot \frac{\sqrt{6}}{\sqrt{6}} = \frac{5\sqrt{6}}{12}$



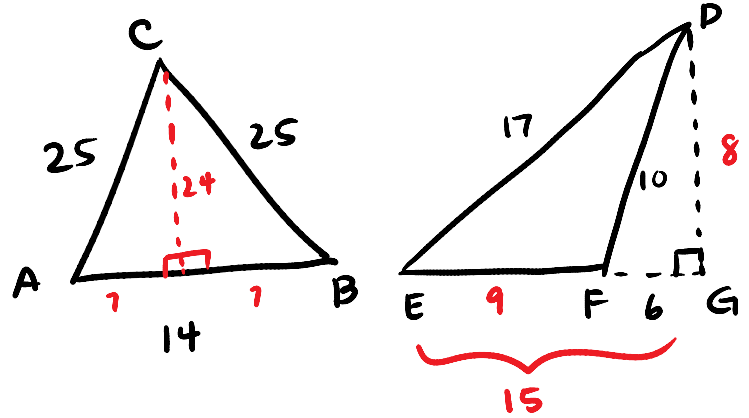
$5^2 + x^2 = 7^2$
 $x^2 = 24$
 $x = 2\sqrt{6}$

#9

a. $\cos \angle A = \boxed{\frac{7}{25}}$

b. $\sin \angle E = \boxed{\frac{8}{17}}$

c. $\sin \angle DFG = \frac{8}{10} = \boxed{\frac{4}{5}}$

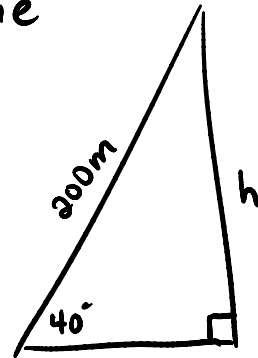


#10 Use the fact that $\sin 40^\circ \approx 0.6428$ to find the height of the kite to the nearest meter

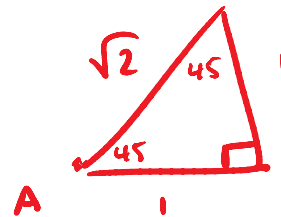
$$\sin 40^\circ = \frac{h}{200}$$

$$.6428 = \frac{h}{200}$$

$$\boxed{h \approx 129}$$



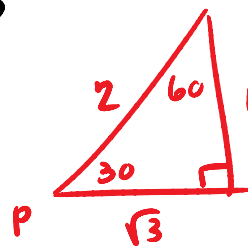
#11 a. If $\tan \angle A = 1$, find $m \angle A$



$$\boxed{m \angle A = 45^\circ}$$

b. If $\sin \angle P = 0.5$, find $m \angle P$

$$\uparrow \left(\frac{1}{2}\right)$$

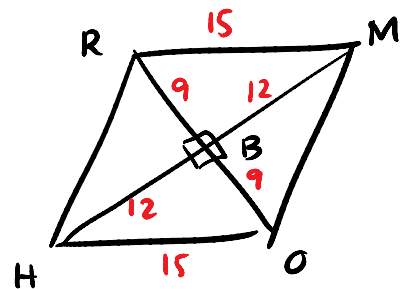


$$\boxed{m \angle P = 30^\circ}$$

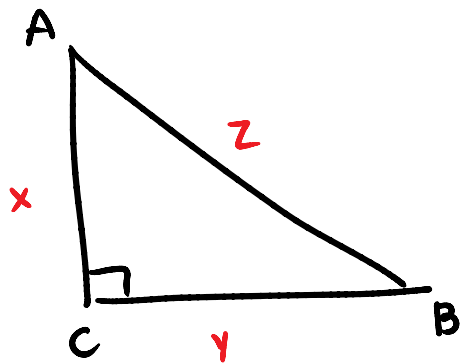
#14 Given: RHOM is a rhombus
RO=18 HM=24

Find: a. $\cos \angle BRM = \frac{9}{15} = \boxed{\frac{3}{5}}$

b. $\tan \angle BHO = \frac{9}{12} = \boxed{\frac{3}{4}}$



#16



Always, Sometimes, Never

a. $\sin \angle A = \cos \angle B$ A

y/z y/z

b. $\sin \angle A = \tan \angle A$ N

y/z y/x

c. $\sin \angle A = \cos \angle A$ S

y/z x/z

#17 If $\triangle EQu$ is equilateral and $\triangle RAT$ is a right \triangle with

$$RA = 2$$

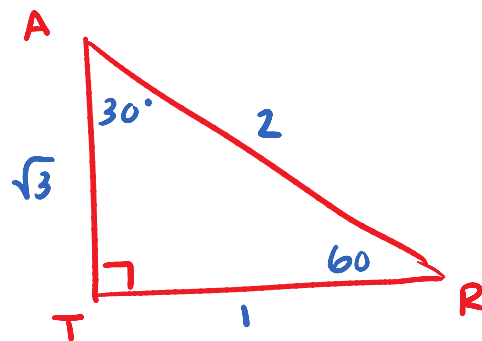
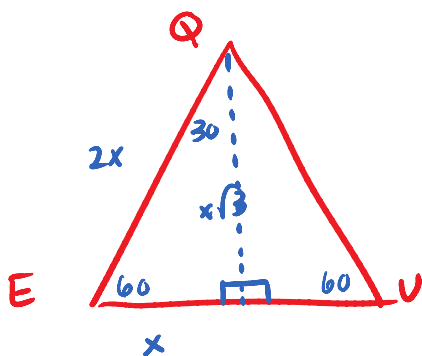
$$RT = 1$$

$$\angle T = 90^\circ$$

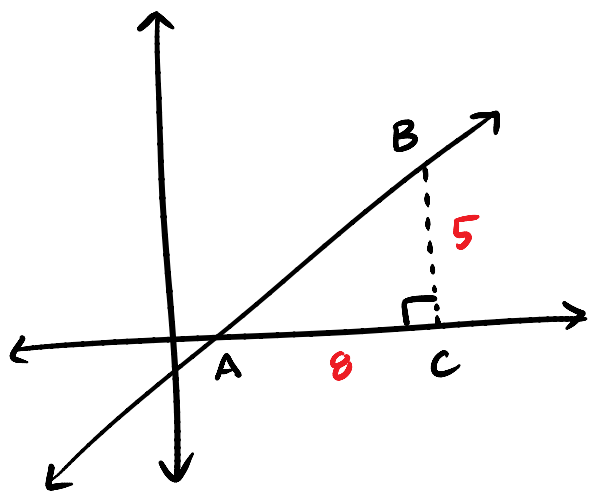
Show that $\sin \angle E = \cos \angle A$

$$\sin \angle E = \frac{x\sqrt{3}}{2x} = \boxed{\frac{\sqrt{3}}{2}}$$

$$\cos \angle A = \boxed{\frac{\sqrt{3}}{2}}$$

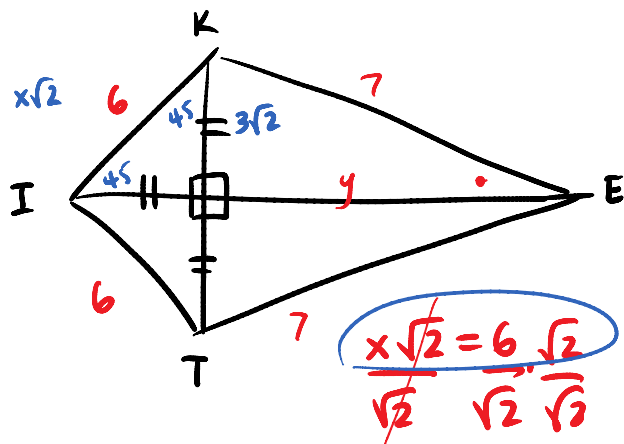


#18 If the slope of \overline{AB} is $\frac{5}{8}$. Find the tangent of $\angle BAC$



$$\tan \angle A = \frac{5}{8}$$

#22



$$\frac{x\sqrt{2}}{\sqrt{2}} = \frac{6\sqrt{2}}{\sqrt{2}}$$

$$x = \frac{6\sqrt{2}}{2}$$

$$x = 3\sqrt{2}$$

$$\tan \angle KEI = \frac{3\sqrt{2}}{\sqrt{31}} \cdot \frac{\sqrt{31}}{\sqrt{31}} = \boxed{\frac{3\sqrt{62}}{31}}$$

$$(3\sqrt{2})^2 + y^2 = 7^2$$

$$18 + y^2 = 49$$

$$y^2 = 31$$

$$y = \sqrt{31}$$