

2-3-20 6th Geo

Ch. 8 Test tomorrow

PT 2

$$\textcircled{30} \frac{2\sqrt{2}}{\sqrt{8}} \cdot \frac{\sqrt{8}}{\sqrt{8}} = \frac{2\sqrt{16}}{8} = \frac{2 \cdot 4}{8} = \frac{8}{8}$$

$$= 1$$
$$\frac{\sqrt{2}}{\sqrt{10}} \cdot \frac{\sqrt{10}}{\sqrt{10}} = \frac{\sqrt{20}}{10} = \frac{\sqrt{4 \cdot 5}}{10} = \frac{2\sqrt{5}}{10} = \frac{\sqrt{5}}{5}$$

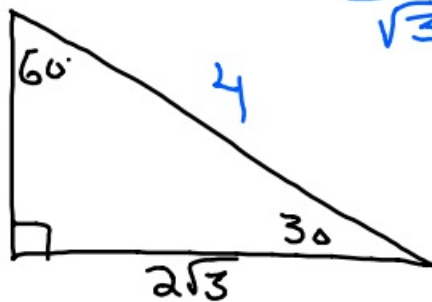
$$\frac{\sqrt{3}}{\sqrt{6}} \cdot \frac{\sqrt{6}}{\sqrt{6}} = \frac{\sqrt{18}}{6} = \frac{\sqrt{9 \cdot 2}}{6} = \frac{3\sqrt{2}}{6} = \frac{\sqrt{2}}{2}$$

$$\sqrt{18} = 3\sqrt{2} \textcircled{33}$$

PT 2

$\textcircled{15}$

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



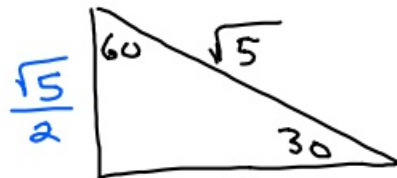
$$\frac{2\sqrt{3}}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{2\sqrt{9}}{3}$$

PT 1

$$\textcircled{27} \frac{3}{\sqrt{15}} \cdot \frac{\sqrt{15}}{\sqrt{15}} = \frac{\cancel{3}\sqrt{15}}{\sqrt{15} \cdot 5} = \frac{\sqrt{15}}{5}$$

PT 1

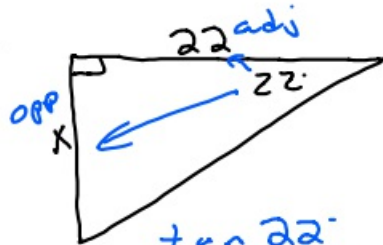
$\textcircled{18}$



$$\frac{\sqrt{5}}{2} \frac{\sqrt{3}}{1} = \frac{\sqrt{15}}{2}$$

PT 1

$\textcircled{5}$



$$\frac{\tan 22^\circ}{1} = \frac{x}{22}$$

$$x = 22 \cdot \tan 22^\circ$$

$$x \approx 8.9$$

PT 2

$\textcircled{29}$

$$\frac{\sqrt{6}}{\sqrt{7}} \cdot \frac{\sqrt{7}}{\sqrt{7}} = \frac{\sqrt{42}}{7}$$

PT 1

$\textcircled{29}$

$$\sqrt{216}$$

$$\begin{array}{l} 216 \\ \swarrow \searrow \\ \textcircled{2} \quad 108 \\ \quad \swarrow \searrow \\ \quad \textcircled{2} \quad 54 \\ \quad \quad \swarrow \searrow \\ \quad \quad \textcircled{2} \quad 27 \\ \quad \quad \quad \swarrow \searrow \\ \quad \quad \quad 9 \quad \textcircled{3} \\ \quad \quad \quad \quad \swarrow \searrow \\ \quad \quad \quad \quad \textcircled{3} \quad \textcircled{3} \end{array} \quad \begin{array}{l} 3 \cdot 2 \sqrt{\textcircled{2} \cdot \textcircled{2} \cdot 2 \cdot \textcircled{3} \cdot \textcircled{3} \cdot 3} \\ 6 \sqrt{6} \end{array}$$

New

① Solve for θ

$$\tan \theta - 3 = -1$$

$$\tan \theta = 2$$

~~$\tan^{-1} \tan \theta = \tan^{-1} 2$~~

$$\theta \approx 63.4^\circ$$

② $5\sqrt{3} \cdot 2\sqrt{8}$

$$10\sqrt{24}$$

$$10 \cdot 2\sqrt{6}$$

$$20\sqrt{6}$$

$$2\sqrt{2 \cdot 2 \cdot 2 \cdot 3}$$

$$2\sqrt{6}$$

③ $2 \cdot \tan \theta - 4 = 10$

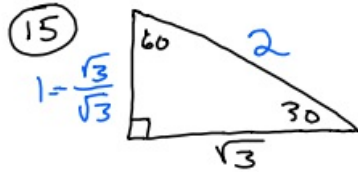
$$2 \cdot \tan \theta = 14$$

$$\tan \theta = 7$$

$$\theta \approx 81.9^\circ$$

2-3-20 7th Geo

PT 1

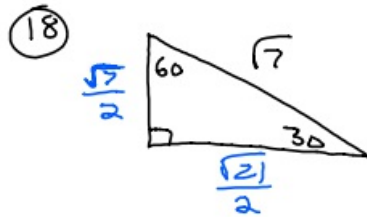


$$\frac{\sqrt{3}}{\sqrt{8}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{3}{3} = 1$$

PT 1

(24) $5\sqrt{2} \cdot 4\sqrt{2} \cdot 2\sqrt{2} \cdot \sqrt{2} \cdot 3 \cdot 2$
 $5 \cdot 4 \cdot 2 \cdot 3 \cdot 2$
 240

PT 2



$$\frac{\sqrt{7}}{2} \cdot \frac{\sqrt{3}}{1}$$

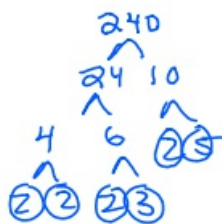
PT 2

(30) $\frac{2\sqrt{2}}{\sqrt{8}} \cdot \frac{\sqrt{8}}{\sqrt{8}} = \frac{2\sqrt{16}}{8} = \frac{2 \cdot 4}{8} = \frac{8}{8} = 1$

$$\frac{\sqrt{5}}{\sqrt{10}} \cdot \frac{\sqrt{10}}{\sqrt{10}} = \frac{\sqrt{50}}{10} = \frac{5\sqrt{2}}{10} = \frac{\sqrt{2}}{2}$$

PT 1

(23) $\sqrt{240}$



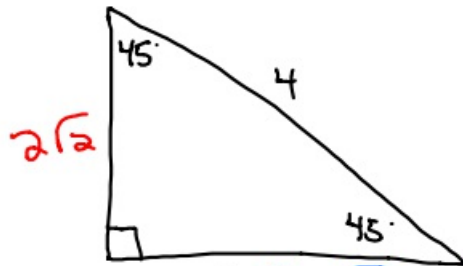
$2 \cdot 2 \cdot 2 \cdot 2 \cdot 3 \cdot 5$
 $4\sqrt{15}$

PT 2

$$\textcircled{27} \quad \frac{4}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{4\sqrt{2}}{2} = 2\sqrt{2}$$

PT 2

②0



$$x \cdot \frac{4}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{4\sqrt{2}}{2} = 2\sqrt{2}$$

PT 1

②6

$$\frac{11}{\sqrt{11}} \cdot \frac{\sqrt{11}}{\sqrt{11}} = \frac{11\sqrt{11}}{11} = \sqrt{11}$$

New

$$\textcircled{1} \quad \tan \theta - 4 = 2$$

$$\begin{array}{ccc} & +4 & +4 \\ \tan \theta & -4 & = 2 \\ \hline \tan \theta & = & 6 \end{array}$$

$$\theta \approx 80.5^\circ$$

②

$$3 \cdot \sin \theta + 1 = 2$$

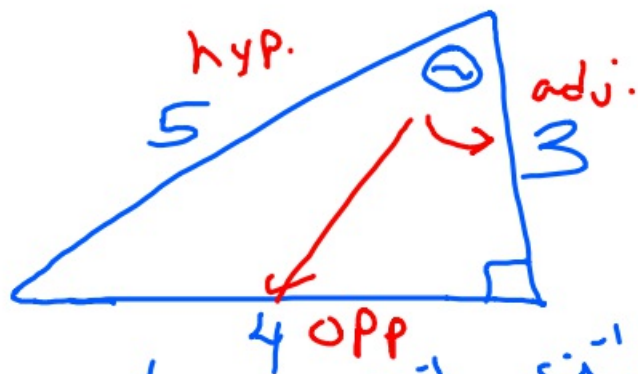
$$\begin{array}{ccc} & -1 & -1 \\ 3 \cdot \sin \theta & +1 & = 2 \\ \hline 3 \cdot \sin \theta & = & 1 \end{array}$$

$$\sin^{-1} \sin \theta = \frac{1}{3}$$

$$\theta \approx 19.5^\circ$$

$$\begin{aligned}
 \textcircled{3} \quad \frac{\sqrt{6}}{\sqrt{8}} \cdot \frac{\sqrt{8}}{\sqrt{8}} &= \frac{\sqrt{48}}{8} = \\
 \frac{\sqrt{6^3}}{\sqrt{2^4}} &= \frac{\sqrt{3}}{2} \\
 &= \frac{2 \cdot 2 \sqrt{2 \cdot 2 \cdot 2 \cdot 2 \cdot 3}}{8} \\
 &= \frac{4\sqrt{3}}{8} \\
 &= \frac{\sqrt{3}}{2}
 \end{aligned}$$

④ In a 3,4,5 right triangle what is the angle in the corner between the 3 and 5?



$$\tan^{-1} \theta = \tan^{-1} \frac{4}{3}$$

$$\sin^{-1} \theta = \sin^{-1} \frac{4}{5}$$

$$\theta \approx 53.1^\circ$$

$$\theta = 53.1^\circ$$