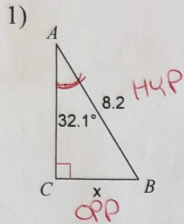


Trig - Missing Sides - NOTES SOH CAH TOA

Date _____

Period _____

Find the measure of each side indicated. Round to the nearest tenth.

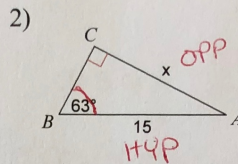


$$\sin \theta = \frac{\text{opp}}{\text{HYP}}$$

$$8.2 \cdot \sin 32.1^\circ = \frac{x}{8.2} \cdot 8.2$$

$$8.2 \cdot \sin 32.1^\circ = x$$

$$\boxed{4.357 = x}$$

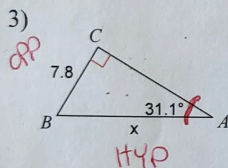


$$\sin \theta = \frac{\text{opp}}{\text{HYP}}$$

$$15 \cdot \sin 63^\circ = \frac{x}{15} \cdot 15$$

$$15 \cdot \sin 63^\circ = x$$

$$\boxed{13.365 = x}$$



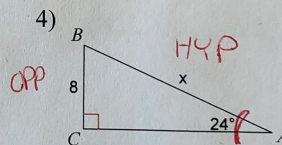
$$\sin \theta = \frac{\text{opp}}{\text{HYP}}$$

$$x \cdot \sin 31.1^\circ = \frac{7.8}{x} \cdot x$$

$$\frac{x \cdot \sin 31.1^\circ}{\sin 31.1^\circ} = \frac{7.8}{\sin 31.1^\circ}$$

$$x = \frac{7.8}{\sin 31.1^\circ}$$

$$\boxed{x = 15.101}$$



$$\sin \theta = \frac{\text{opp}}{\text{HYP}}$$

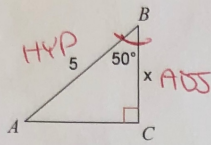
$$x \cdot \sin 24^\circ = \frac{8}{x} \cdot x$$

$$\frac{x \cdot \sin 24^\circ}{\sin 24^\circ} = \frac{8}{\sin 24^\circ}$$

$$x = \frac{8}{\sin 24^\circ}$$

$$\boxed{x = 19.669}$$

5)



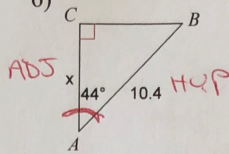
$$\cos \theta = \frac{\text{ADJ}}{\text{HYP}}$$

$$5 \cdot \cos 50^\circ = \frac{x}{5} \cdot 5$$

$$5 * \cos 50^\circ = x$$

$$\boxed{3.214 = x}$$

6)



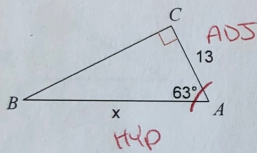
$$\cos \theta = \frac{\text{ADJ}}{\text{HYP}}$$

$$10.4 \cdot \cos 44^\circ = \frac{x}{10.4} \cdot 10.4$$

$$10.4 * \cos 44^\circ = x$$

$$\boxed{7.481 = x}$$

7)



$$\cos \theta = \frac{\text{ADJ}}{\text{HYP}}$$

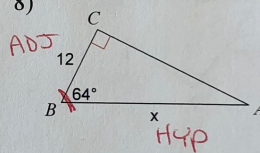
$$x \cdot \cos 63^\circ = \frac{13}{x} \cdot x$$

$$\frac{x * \cos 63^\circ}{\cos 63^\circ} = \frac{13}{\cos 63^\circ}$$

$$x = \frac{13}{\cos 63^\circ}$$

$$\boxed{x = 28.635}$$

8)



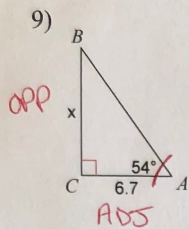
$$\cos \theta = \frac{\text{ADJ}}{\text{HYP}}$$

$$x \cdot \cos 64^\circ = \frac{12}{x} \cdot x$$

$$\frac{x * \cos 64^\circ}{\cos 64^\circ} = \frac{12}{\cos 64^\circ}$$

$$x = \frac{12}{\cos 64^\circ}$$

$$\boxed{x = 27.374}$$

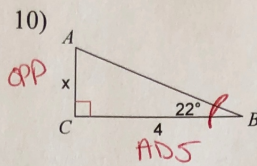


$$\text{TAN } \theta = \frac{\text{OPP}}{\text{ADJ}}$$

$$6.7 \cdot \text{TAN } 54^\circ = \frac{x}{6.7} \cdot 6.7$$

$$6.7 \cdot \text{TAN } 54^\circ = x$$

$$\boxed{9.222 = x}$$

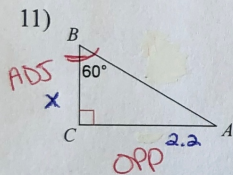


$$\text{TAN } \theta = \frac{\text{OPP}}{\text{ADJ}}$$

$$4 \cdot \text{TAN } 22^\circ = \frac{x}{4} \cdot 4$$

$$4 \cdot \text{TAN } 22^\circ = x$$

$$\boxed{1.616 = x}$$



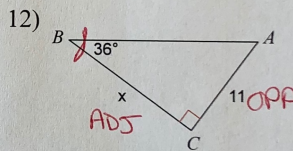
$$\text{TAN } \theta = \frac{\text{OPP}}{\text{ADJ}}$$

$$x \cdot \text{TAN } 60^\circ = \frac{2.2}{x} \cdot x$$

$$\frac{x \cdot \text{TAN } 60^\circ}{\text{TAN } 60^\circ} = \frac{2.2}{\text{TAN } 60^\circ}$$

$$x = \frac{2.2}{\text{TAN } 60^\circ}$$

$$\boxed{x = 1.270}$$



$$\text{TAN } \theta = \frac{\text{OPP}}{\text{ADJ}}$$

$$x \cdot \text{TAN } 36^\circ = \frac{11}{x} \cdot x$$

$$\frac{x \cdot \text{TAN } 36^\circ}{\text{TAN } 36^\circ} = \frac{11}{\text{TAN } 36^\circ}$$

$$x = \frac{11}{\text{TAN } 36^\circ}$$

$$\boxed{x = 15.140}$$