

Geometry
WS – Practice SohCahToa

Name _____ **KEY**

Use the diagrams at the right to find the trigonometric ratio.

1. $\sin A = \frac{a}{c}$

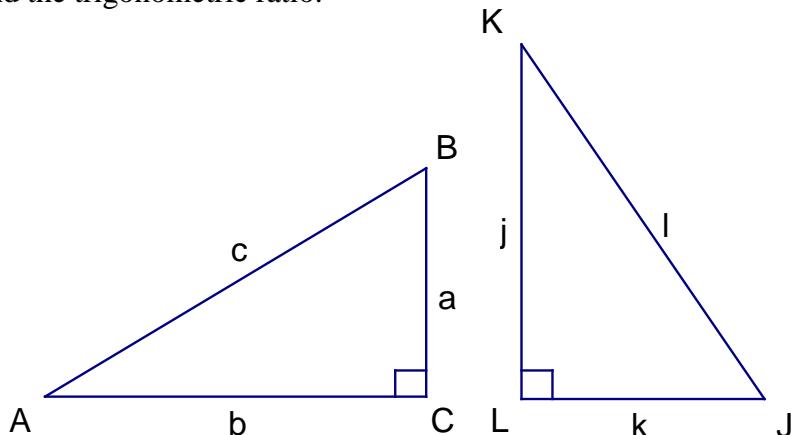
2. $\cos A = \frac{b}{c}$

3. $\tan B = \frac{b}{a}$

4. $\sin J = \frac{j}{l}$

5. $\cos K = \frac{k}{l}$

6. $\tan K = \frac{k}{j}$



Use a calculator to approximate the given value to four decimal places.

7. $\sin 30^\circ = 0.5$

8. $\cos 18^\circ = 0.9511$

9. $\tan 72^\circ = 3.0777$

10. $\sin 48^\circ = 0.7431$

11. $\tan 42^\circ = 0.9004$

12. $\cos 65^\circ = 0.4277$

13. $\tan 14^\circ = 0.2493$

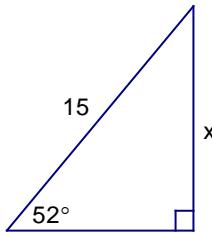
14. $\sin 83^\circ = 0.9925$

Fill in the blank then solve for the variable. Round decimals to the nearest tenth.

15. $\sin 52^\circ = \frac{x}{?}$

16. $\cos ?^\circ = \frac{x}{14}$

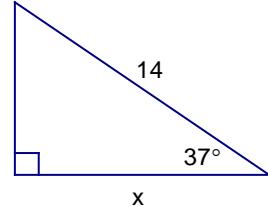
17. $\tan 24^\circ = \frac{8}{?}$



$$\sin 52^\circ = \frac{x}{15}$$

$$15 \sin 52^\circ = x$$

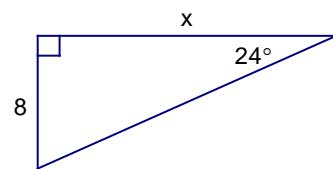
$$11.8 = x$$



$$\cos 37^\circ = \frac{x}{14}$$

$$14 \cos 37^\circ = x$$

$$11.2 = x$$



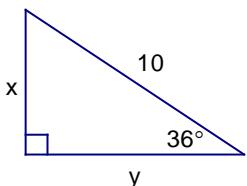
$$\tan 24^\circ = \frac{8}{x}$$

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

$$x = 18.0$$

Find the value of each variable. Round decimals to the nearest tenth.

18.

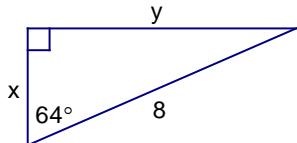


$$\sin 26^\circ = \frac{x}{10}$$

$$10 \sin 36^\circ = x$$

$$5.9 = x$$

19.

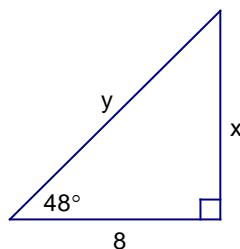


$$\cos 64^\circ = \frac{x}{8}$$

$$8 \cos 64^\circ = x$$

$$3.5 = x$$

20.



$$\tan 48^\circ = \frac{x}{8}$$

$$8 \tan 48^\circ = x$$

$$8.9 = x$$

$$\cos 26^\circ = \frac{y}{10}$$

$$10 \cos 36^\circ = y$$

$$8.1 = y$$

$$\sin 64^\circ = \frac{y}{8}$$

$$8 \sin 64^\circ = y$$

$$7.2 = y$$

$$\cos 48^\circ = \frac{x}{8}$$

$$8 \cos 48^\circ = x$$

$$5.4 = x$$