

# Trigonometry Ratios (A) Maze!

**Directions:** Start at the top **LEFT**. Follow the instructions. Use your solutions to make your way through the maze to get to the end. Circle the answers for your route.

**Start!**

<p>Find sin A.</p> <p><math>\frac{24}{25}</math></p>	<p>Find cos B.</p> <p><math>\frac{4}{5}</math></p>	<p>Find tan A.</p> <p><math>\frac{4}{3}</math></p>	<p>Find cos B.</p> <p><math>\frac{12}{13}</math></p>
$\frac{7}{25}$	$\frac{3}{5}$	$\frac{3}{4}$	$\frac{12}{13}$
<p>Find sin B.</p> <p><math>\frac{7}{25}</math></p>	<p>Find cos A.</p> <p><math>\frac{56}{33}</math></p>	<p>Find tan A.</p> <p><math>\frac{33}{56}</math></p>	<p>Find cos A.</p> <p><math>\frac{12}{13}</math></p>
$\frac{15}{17}$	$\frac{24}{25}$	$\frac{35}{37}$	$\frac{8}{15}$
<p>Find tan A.</p> <p><math>\frac{40}{9}</math></p>	<p>Find tan B.</p> <p><math>\frac{3}{4}</math></p>	<p>Find cos B.</p> <p><math>\frac{12}{35}</math></p>	<p>Find sin A.</p> <p><math>\frac{12}{35}</math></p>
$\frac{9}{41}$	$\frac{4}{3}$	$\frac{12}{37}$	$\frac{55}{73}$
<p>Find sin B.</p> <p><math>\frac{12}{37}</math></p>	<p>Find cos A.</p> <p><math>\frac{9}{40}</math></p>	<p>Find cos A.</p> <p><math>\frac{40}{41}</math></p>	<p>Find sin B.</p> <p><math>\frac{40}{41}</math></p>
$\frac{4}{5}$	$\frac{8}{17}$	$\frac{9}{41}$	$\frac{48}{73}$
<b>END!</b>	<p>Find sin A.</p> <p><math>\frac{8}{15}</math></p>	<p>Find tan A.</p> <p><math>\frac{9}{40}</math></p>	<p>Find tan A.</p> <p><math>\frac{56}{33}</math></p>
	$\frac{8}{15}$	$\frac{9}{40}$	$\frac{56}{33}$

# Trigonometry Ratios (A) Maze!

**Directions:** Start at the top LEFT. Follow the instructions. Use your solutions to make your way through the maze to get to the end. Circle the answers for your route.

**Start!**

The maze consists of a grid of octagonal cells. Some cells contain a right-angled triangle with two sides and the hypotenuse labeled, and a question asking for a trigonometric ratio. Other cells contain a fraction. The goal is to start at the top-left cell and follow a path of correct answers to reach the 'END!' cell at the bottom-left.

**Row 1:**

- Cell 1: Find  $\sin A$ . Triangle with vertical side 7, horizontal side 24, hypotenuse 25. Answer:  $\frac{24}{25}$  (circled).
- Cell 2: Find  $\cos B$ . Triangle with vertical side 3, horizontal side 4, hypotenuse 5. Answer:  $\frac{4}{5}$  (circled).
- Cell 3: Find  $\tan A$ . Triangle with vertical side 6, horizontal side 8, hypotenuse 10. Answer:  $\frac{3}{4}$  (circled).
- Cell 4: Find  $\cos B$ . Triangle with vertical side 5, horizontal side 12, hypotenuse 13. Answer:  $\frac{12}{13}$ .

**Row 2:**

- Cell 1:  $\frac{7}{25}$ .
- Cell 2: Find  $\sin B$ . Triangle with vertical side 16, horizontal side 30, hypotenuse 34. Answer:  $\frac{7}{25}$  (circled).
- Cell 3: Find  $\cos A$ . Triangle with vertical side 14, horizontal side 48, hypotenuse 50. Answer:  $\frac{56}{33}$  (circled).
- Cell 4: Find  $\tan A$ . Triangle with vertical side 66, horizontal side 112, hypotenuse 130. Answer:  $\frac{33}{56}$ .
- Cell 5: Find  $\cos A$ . Triangle with vertical side 24, horizontal side 70, hypotenuse 74. Answer:  $\frac{12}{13}$ .

**Row 3:**

- Cell 1:  $\frac{15}{17}$  (circled).
- Cell 2:  $\frac{24}{25}$ .
- Cell 3:  $\frac{35}{37}$ .
- Cell 4:  $\frac{8}{15}$ .

**Row 4:**

- Cell 1: Find  $\tan A$ . Triangle with vertical side 9, horizontal side 40, hypotenuse 41. Answer:  $\frac{40}{9}$  (circled).
- Cell 2: Find  $\tan B$ . Triangle with vertical side 9, horizontal side 12, hypotenuse 15. Answer:  $\frac{3}{4}$  (circled).
- Cell 3: Find  $\cos B$ . Triangle with vertical side 12, horizontal side 35, hypotenuse 37. Answer:  $\frac{12}{35}$ .
- Cell 4: Find  $\sin A$ . Triangle with vertical side 32, horizontal side 60, hypotenuse 68. Answer:  $\frac{8}{15}$ .

**Row 5:**

- Cell 1:  $\frac{9}{41}$ .
- Cell 2:  $\frac{4}{3}$ .
- Cell 3:  $\frac{12}{37}$  (circled).
- Cell 4:  $\frac{55}{73}$ .

**Row 6:**

- Cell 1: Find  $\sin B$ . Triangle with vertical side 21, horizontal side 28, hypotenuse 35. Answer:  $\frac{12}{37}$  (circled).
- Cell 2: Find  $\cos A$ . Triangle with vertical side 12, horizontal side 35, hypotenuse 37. Answer:  $\frac{9}{40}$ .
- Cell 3: Find  $\cos A$ . Triangle with vertical side 18, horizontal side 80, hypotenuse 82. Answer:  $\frac{40}{41}$  (circled).
- Cell 4: Find  $\sin B$ . Triangle with vertical side 48, horizontal side 55, hypotenuse 73. Answer:  $\frac{40}{41}$ .

**Row 7:**

- Cell 1:  $\frac{4}{5}$  (circled).
- Cell 2:  $\frac{8}{17}$  (circled).
- Cell 3:  $\frac{9}{41}$ .
- Cell 4:  $\frac{48}{73}$  (circled).

**Row 8:**

- Cell 1: **END!**
- Cell 2:  $\frac{8}{15}$ .
- Cell 3: Find  $\sin A$ . Triangle with vertical side 8, horizontal side 15, hypotenuse 17. Answer:  $\frac{9}{40}$  (circled).
- Cell 4: Find  $\tan A$ . Triangle with vertical side 27, horizontal side 120, hypotenuse 123. Answer:  $\frac{56}{33}$  (circled).
- Cell 5: Find  $\tan A$ . Triangle with vertical side 33, horizontal side 56, hypotenuse 65. Answer:  $\frac{56}{33}$  (circled).

# Trigonometry Ratios (B) Maze!

**Directions:** Start at the top LEFT. Follow the instructions. Use your solutions to make your way through the maze to get to the end. Circle the answers for your route.

**Start!**

<p>Find sin A.</p> <p><math>\frac{24}{25}</math></p>	<p>Find cos B.</p> <p><math>\frac{4}{5}</math></p>	<p>Find tan A.</p> <p><math>\frac{4}{3}</math></p>	<p>Find cos B.</p>
$\frac{7}{25}$	$\frac{3}{5}$	$\frac{3}{4}$	$\frac{12}{13}$
<p>Find sin B.</p> <p><math>\frac{7}{25}</math></p>	<p>Find cos A.</p> <p><math>\frac{56}{33}</math></p>	<p>Find tan A.</p> <p><math>\frac{33}{56}</math></p>	<p>Find cos A.</p>
$\frac{15}{17}$	$\frac{24}{25}$	$\frac{35}{37}$	$\frac{8}{15}$
<p>Find tan A.</p> <p><math>\frac{40}{9}</math></p>	<p>Find tan B.</p> <p><math>\frac{3}{4}</math></p>	<p>Find cos B.</p> <p><math>\frac{12}{35}</math></p>	<p>Find sin A.</p>
$\frac{9}{41}$	$\frac{4}{3}$	$\frac{12}{37}$	$\frac{55}{73}$
<p>Find sin B.</p> <p><math>\frac{12}{37}</math></p>	<p>Find cos A.</p> <p><math>\frac{9}{40}</math></p>	<p>Find cos A.</p> <p><math>\frac{40}{41}</math></p>	<p>Find sin B.</p>
$\frac{4}{5}$	$\frac{8}{17}$	$\frac{9}{41}$	$\frac{48}{73}$
<b>END!</b>	<p>Find sin A.</p> <p><math>\frac{8}{15}</math></p>	<p>Find tan A.</p> <p><math>\frac{9}{40}</math></p>	<p>Find tan A.</p> <p><math>\frac{56}{33}</math></p>

# Trigonometry Ratios (B) Maze!

**Directions:** Start at the top LEFT. Follow the instructions. Use your solutions to make your way through the maze to get to the end. Circle the answers for your route.

**Start!**

<p>Find sin A.</p> <p><math>\frac{24}{25}</math></p>	<p>Find cos B.</p> <p><math>\frac{4}{5}</math></p>	<p>Find tan A.</p> <p><math>\frac{4}{3}</math></p>	<p>Find cos B.</p> <p><math>\frac{12}{13}</math></p>
$\frac{7}{25}$	$\frac{3}{5}$	$\frac{3}{4}$	$\frac{12}{13}$
<p>Find sin B.</p> <p><math>\frac{7}{25}</math></p>	<p>Find cos A.</p> <p><math>\frac{56}{33}</math></p>	<p>Find tan A.</p> <p><math>\frac{33}{56}</math></p>	<p>Find cos A.</p> <p><math>\frac{12}{13}</math></p>
$\frac{15}{17}$	$\frac{24}{25}$	$\frac{35}{37}$	$\frac{8}{15}$
<p>Find tan A.</p> <p><math>\frac{40}{9}</math></p>	<p>Find tan B.</p> <p><math>\frac{3}{4}</math></p>	<p>Find cos B.</p> <p><math>\frac{12}{35}</math></p>	<p>Find sin A.</p> <p><math>\frac{12}{35}</math></p>
$\frac{9}{41}$	$\frac{4}{3}$	$\frac{12}{37}$	$\frac{55}{73}$
<p>Find sin B.</p> <p><math>\frac{12}{37}</math></p>	<p>Find cos A.</p> <p><math>\frac{9}{40}</math></p>	<p>Find cos A.</p> <p><math>\frac{40}{41}</math></p>	<p>Find sin B.</p> <p><math>\frac{40}{41}</math></p>
$\frac{4}{5}$	$\frac{8}{17}$	$\frac{9}{41}$	$\frac{48}{73}$
<b>END!</b>	<p>Find sin A.</p> <p><math>\frac{8}{15}</math></p>	<p>Find tan A.</p> <p><math>\frac{9}{40}</math></p>	<p>Find tan A.</p> <p><math>\frac{56}{33}</math></p>

# Trigonometry Sides Maze!

**Directions:** Start at the top **LEFT**. Solve for  $x$ . (Round to hundredths) Use your solutions to make your way through the maze to get to the end. Circle the answers for your route.

**Start!**

15.76    24    39°    19.43    12    41°    9.06     $x$     65°    12

12.31    10    7.87    25.73

$x$     44°    18    20    60°    17.32    13    38°    17.26    16    68°     $x$

17.38    17.61    10.16    14.83

$x$     25°    20    16.44    23    54°    18.54    21    62°    12.43    16    34°     $x$

18.13    13.52    9.86    8.95

15    48°     $x$     41.51     $x$     56°    28    45.67    34    30°    29.44    36    52°     $x$

20.18    23.21    17.6    46.08

$x$     21    51°    16.32    16    68°     $x$     39.6     $x$     47°    12    8.18    **END!**

# Trigonometry Sides Maze!

**Directions:** Start at the top **LEFT**. Solve for  $x$ . (Round to hundredths) Use your solutions to make your way through the maze to get to the end. Circle the answers for your route.

The maze consists of a grid of octagons. Shaded octagons are not part of the path. The path starts at the top-left octagon and ends at the bottom-right octagon. The path is marked with circled answers.

**Start!**

Row 1:  $x$ , 15.76,  $24$ ,  $39^\circ$ ,  $x$ , 19.43,  $12$ ,  $41^\circ$ ,  $x$ , 9.06,  $x$ ,  $65^\circ$ , 12

Row 2: 12.31, 10, 7.87, 25.73

Row 3:  $x$ ,  $44^\circ$ , 18, 18.64,  $20$ ,  $60^\circ$ ,  $x$ , 17.32, 13,  $38^\circ$ ,  $x$ , 17.26,  $16$ ,  $68^\circ$ ,  $x$

Row 4: 17.38, 17.61, 10.16, 14.83

Row 5:  $25^\circ$ , 20, 16.44,  $23$ ,  $54^\circ$ ,  $x$ , 18.54,  $62^\circ$ , 21,  $x$ , 12.43,  $16$ ,  $34^\circ$ ,  $x$

Row 6: 18.13, 13.52, 9.86, 8.95

Row 7: 15, 48°,  $x$ , 41.51,  $56^\circ$ ,  $x$ , 45.67, 34,  $30^\circ$ ,  $x$ , 29.44,  $36$ ,  $52^\circ$ ,  $x$

Row 8: 20.18, 23.21, 17.6, 46.08

Row 9:  $x$ , 21,  $51^\circ$ , 16.32, 16,  $68^\circ$ ,  $x$ , 39.6,  $x$ ,  $47^\circ$ , 12, 8.18, **END!**

# Trigonometry Angles Maze!

**Directions:** Start at the top **LEFT**. Solve for  $x$ . (Round to hundredths) Use your solutions to make your way through the maze to get to the end. Circle the answers for your route.

The maze consists of a grid of octagons. Shaded octagons are not part of the path. The path starts at the top-left octagon and ends at the bottom-right octagon. The path is formed by unshaded octagons containing either a trigonometry problem or a numerical answer.

**Start!**

22  
 $x^\circ$   
 16  
 36.03

21  
 $x^\circ$   
 19  
 42.14

34  
 $x^\circ$   
 36  
 46.64

16  
 $x^\circ$   
 20  
 38.66

46.66

25.21

22.33

19  
 $x^\circ$   
 50  
 67.67

36  
 $x^\circ$   
 24  
 61.04

16  
 $x^\circ$   
 14  
 62.28

12  
 $x^\circ$   
 6  
 63.43

41.81

43.07

62.28

63.43

28  
 $x^\circ$   
 41  
 55.67

30  
 $x^\circ$   
 20  
 47.33

25  
 $x^\circ$   
 34  
 67.67

54.68

48.19

42.51

30  
 $x^\circ$   
 42.67

38  
 $x^\circ$   
 49  
 47.33

16  
 $x^\circ$   
 32  
 42.67

25  
 $x^\circ$   
 37  
 42.67

50.85

24  
 $x^\circ$   
 22  
 47.49

16  
 $x^\circ$   
 32  
 71.08

35  
 $x^\circ$   
 37  
 71.08

39.15

68.2

60  
 $x^\circ$   
 60  
 18.92

34.85

20  
 $x^\circ$   
 8  
 66.42

16  
 $x^\circ$   
 19  
 57.36

21  
 $x^\circ$   
 12  
 34.85

34.85

66.42

57.36

**END!**

# Trigonometry Angles Maze!

**Directions:** Start at the top **LEFT**. Solve for  $x$ . (Round to hundredths) Use your solutions to make your way through the maze to get to the end. Circle the answers for your route.

The maze consists of a grid of octagons. Some octagons contain right-angled triangles with one angle labeled  $x^\circ$  and two sides labeled with numbers. Other octagons contain numerical values. The path from 'Start!' to 'END!' is marked with circled answers.

**Start!**

Row 1:  $x^\circ$  triangle (22, 16), 36.03,  $x^\circ$  triangle (21, 19), 42.14,  $x^\circ$  triangle (34, 36), 46.64,  $x^\circ$  triangle (16, 20).

Row 2: 46.66, 25.21, 22.33, 38.66

Row 3:  $x^\circ$  triangle (36, 24), 28.96,  $x^\circ$  triangle (16, 14), 61.04,  $x^\circ$  triangle (19, 50), 67.67,  $x^\circ$  triangle (12, 6).

Row 4: 41.81, 43.07, 62.28, 63.43

Row 5:  $x^\circ$  triangle (30, 20), 54.68,  $x^\circ$  triangle (28, 41), 55.67,  $x^\circ$  triangle (43, 20), 47.33,  $x^\circ$  triangle (25, 34).

Row 6: 48.19, 42.51, 30, 42.67

Row 7:  $x^\circ$  triangle (38, 49), 50.85,  $x^\circ$  triangle (24, 22), 47.49,  $x^\circ$  triangle (16, 32), 71.08,  $x^\circ$  triangle (35, 37).

Row 8: 39.15, 68.2, 60, 18.92

Row 9:  $x^\circ$  triangle (21, 12), 34.85,  $x^\circ$  triangle (20, 8), 66.42,  $x^\circ$  triangle (16, 19), 57.36, **END!**