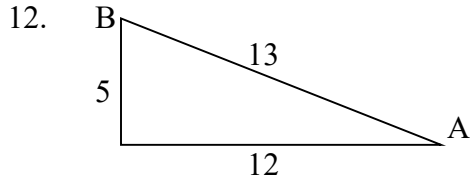


Sine, Cosine and Tangent

Find $\sin A$, $\cos A$, $\tan A$, $\sin B$, $\cos B$, and $\tan B$. Write your answers in fraction form.



$$\sin A =$$

$$\sin B =$$

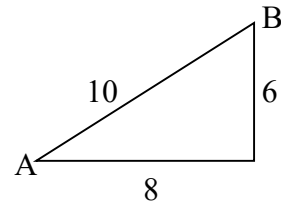
$$\cos A =$$

$$\cos B =$$

$$\tan A =$$

$$\tan B =$$

13.



$$\sin A =$$

$$\sin B =$$

$$\cos A =$$

$$\cos B =$$

$$\tan A =$$

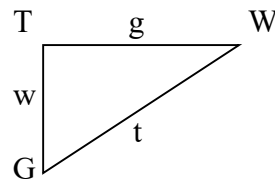
$$\tan B =$$

Find each trigonometric ratio to four decimal places. Use the figure at the right.

14. $\cos W$ if $t = 26$, $g = 10$

15. $\sin G$ if $t = 20$, $w = 16$

16. $\tan W$ if $w = 7$, $g = 24$



17. Triangle ABC is a right triangle with the right angle at C. $\sin A = 3/5$. What is $\cos B$?

18. Triangle DEF is a right triangle with the right angle at D. If the $\sin E = 5/13$ and the $\cos E = 12/13$, what is the $\tan E$?

19. Evaluate: $\frac{\sin^2 \theta + \cos^2 \theta}{5}$

20. Evaluate: $\frac{\cos^2 50^\circ + \sin^2 50^\circ}{\sin^2 38^\circ + \cos^2 38^\circ}$

Use a calculator to find the value of each ratio to four decimal places.

19. $\sin 25^\circ$

20. $\cos 130^\circ$

21. $\tan 57^\circ$

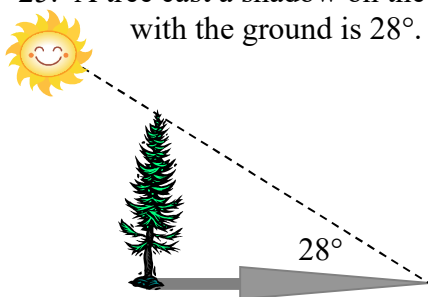
Use a calculator to find the angle for each trigonometric ratio. (2 decimal places)

22. $\sin A = 0.2079$

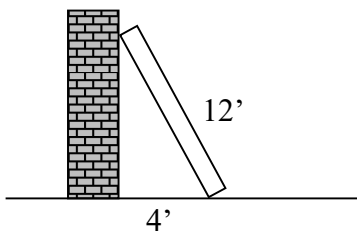
23. $\cos B = 0.5417$

24. $\tan 2.4751$

25. A tree cast a shadow on the ground. The shadow is 34 feet long. The angle that the sun makes with the ground is 28° . Find the height of the tree to two decimal places.



26. A 12'-long board is propped against a wall. If the bottom of the board is 4 feet from the bottom of the wall, what angle does the board make with the ground?



27. A plane is flying at an altitude of 24,300 meters. The angle that the plane makes with vertical is 48° . How far away from the radar station is the plane?

