

Trig Ratios

Find the value of each trigonometric ratio to the nearest ten-thousandth.

1) $\cos 83^\circ$

2) $\sin 24^\circ$

3) $\sin 58^\circ$

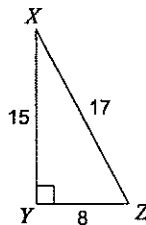
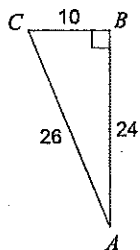
4) $\tan 63^\circ$

5) $\sin 42^\circ$

6) $\sin 0^\circ$

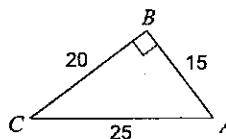
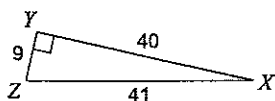
7) $\cos C$

8) $\sin X$



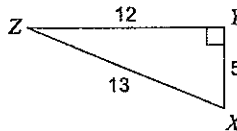
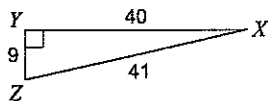
9) $\tan X$

10) $\tan A$



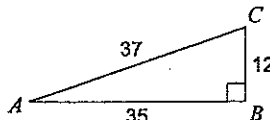
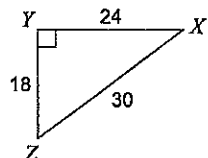
11) $\tan Z$

12) $\sin Z$

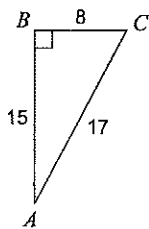


13) $\cos X$

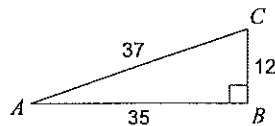
14) $\sin C$



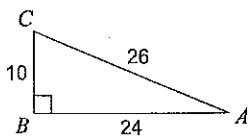
15) $\cos A$



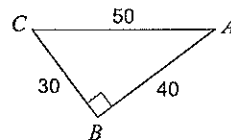
16) $\cos C$



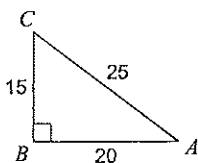
17) $\sin C$



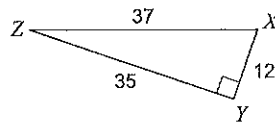
18) $\cos C$



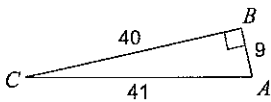
19) $\cos A$



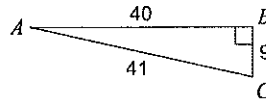
20) $\sin Z$



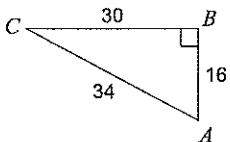
21) $\cos C$



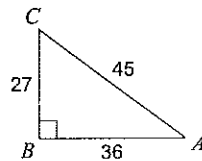
22) $\sin C$



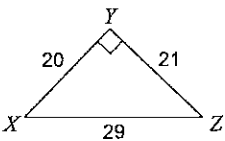
23) $\sin A$



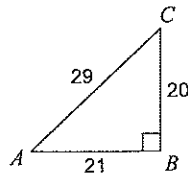
24) $\sin A$



25) $\sin Z$



26) $\tan C$



Find each angle measure to the nearest degree.

27) $\sin C = 0.6691$

28) $\tan W = 1.0724$

29) $\sin W = 0.7660$

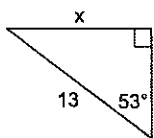
30) $\tan A = 0.4877$

31) $\sin V = 0.9994$

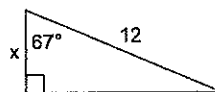
32) $\cos A = 0.1908$

Find the missing side. Round to the nearest tenth.

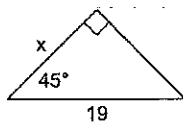
33)



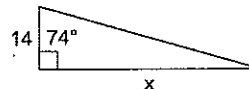
34)



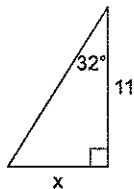
35)



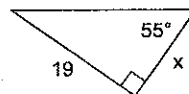
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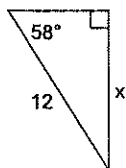
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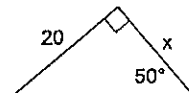
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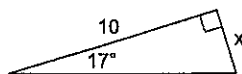
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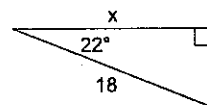
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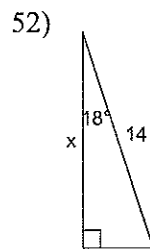
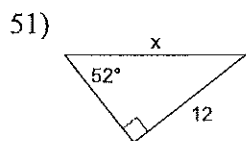
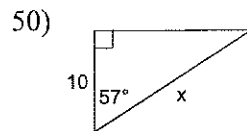
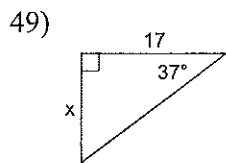
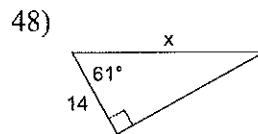
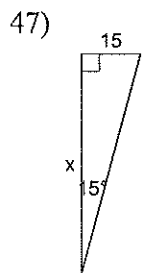
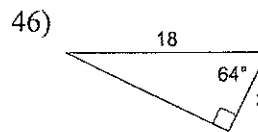
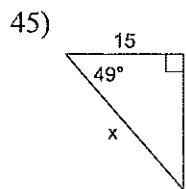
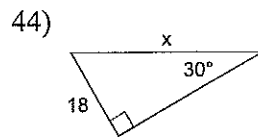
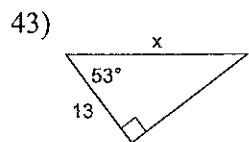


41)

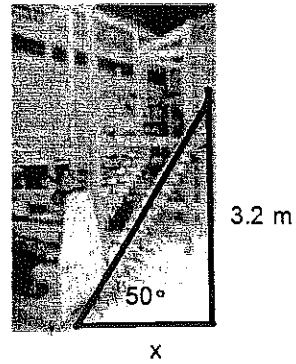


42)

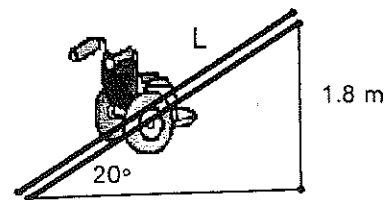




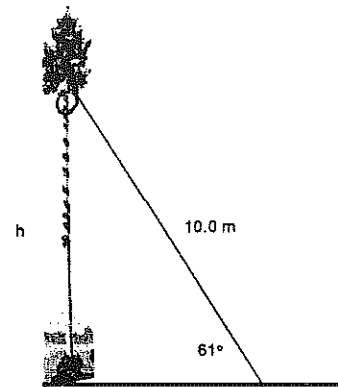
1. The stringer, that supports the stairs, makes an angle of 50° with the floor. It reaches 3.2 m up the wall. How far is the base of the stringer from the wall?



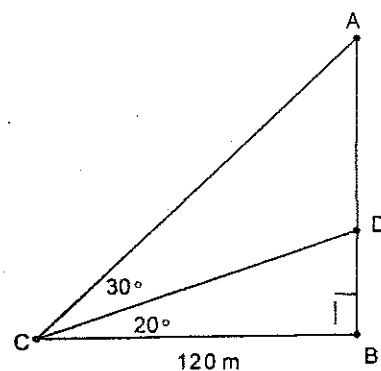
2. A ramp has an angle of inclination of 20° . It has a vertical height of 1.8 m. What is the length, L meters, of the ramp?



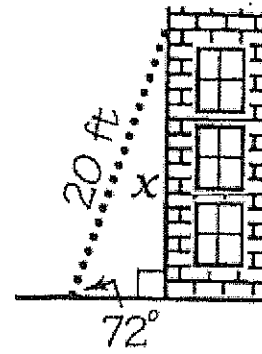
4. A damaged tree is supported by a guy wire 10.0 m long. The wire makes an angle of 61° with the ground. Calculate the height at which the guy wire is attached to the tree.



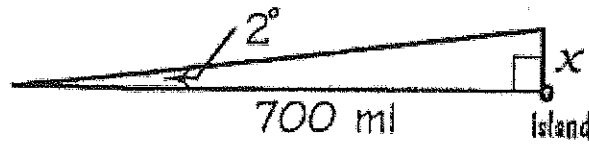
5. Find the length of DB and AB



6. When a 20-ft ladder is leaned against a wall, it makes a 72 degrees angle with the ground. How high up on the wall does the ladder reach?



7. A ship is sailing toward a small island 700 mi away. If the ship is 2 degrees off course, by how many miles will it miss the island?



8. A cable from the top of a 100-ft telephone tower makes a 50 degrees angle with the ground. How long is the cable?

