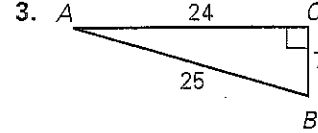
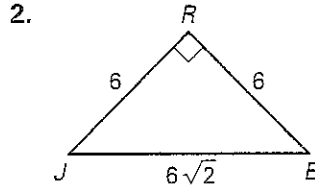
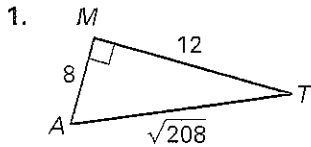


Practice C

For use with pages 558–566

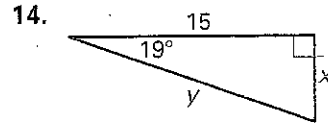
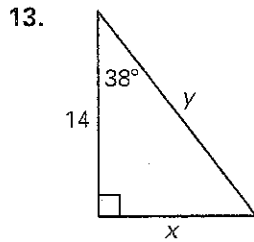
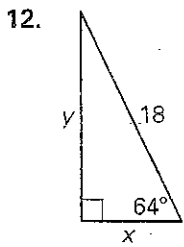
Find the sine, the cosine, and the tangent of the acute angles of the triangle. Express each answer as a decimal rounded to four places.



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

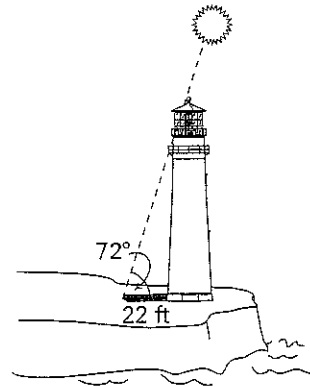
- | | | | |
|--------------------|--------------------|---------------------|---------------------|
| 4. $\sin 49^\circ$ | 5. $\cos 83^\circ$ | 6. $\tan 4^\circ$ | 7. $\sin 71^\circ$ |
| 8. $\tan 75^\circ$ | 9. $\cos 15^\circ$ | 10. $\sin 32^\circ$ | 11. $\cos 64^\circ$ |

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



In Exercises 15–17, use the figure of the lighthouse.

- At 2 P.M. the shadow of a lighthouse is 22 feet long and the angle of elevation is 72° . Find the height of the lighthouse.
- At 4 P.M. the angle of elevation of the sun is 40° . Find the length of the shadow cast by the lighthouse.
- At 6 P.M. will the length of the shadow be longer or shorter than it was at 4 P.M.? Explain.



In Exercises 18 and 19, use the figure of the escalator.

- A new store is being built. An escalator is planned. It will make an angle of 34° with the floor. If the vertical distance between floors is 14 feet, how long will the escalator be?
- If the angle made with the floor is changed to 36° , will the length of the escalator increase or decrease? Explain.

