

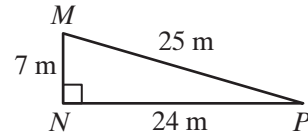
Practice 11-6

Sine, Cosine, and Tangent Ratios

Find each value. Round to four decimal places.

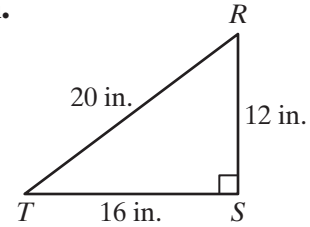
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|--------------------------|--------------------------|
| 1. $\cos 20^\circ$ _____ | 2. $\tan 64^\circ$ _____ |
| 3. $\sin 41^\circ$ _____ | 4. $\tan 8^\circ$ _____ |
| 5. $\sin 88^\circ$ _____ | 6. $\cos 53^\circ$ _____ |

Use $\triangle MNP$ for Exercises 7 to 12. Find each ratio.



- | | |
|--------------------------------|---------------------------------|
| 7. sine of $\angle P$ _____ | 8. cosine of $\angle P$ _____ |
| 9. tangent of $\angle P$ _____ | 10. sine of $\angle M$ _____ |
| 11. cosine of $\angle M$ _____ | 12. tangent of $\angle M$ _____ |

Use $\triangle RST$ for Exercises 13 to 18. Find each ratio in simplest form.



- | | |
|---------------------------------|---------------------------------|
| 13. sine of $\angle T$ _____ | 14. cosine of $\angle T$ _____ |
| 15. tangent of $\angle T$ _____ | 16. sine of $\angle R$ _____ |
| 17. cosine of $\angle R$ _____ | 18. tangent of $\angle R$ _____ |

Write each ratio using square root signs. Use your knowledge of 45° - 45° - 90° and 30° - 60° - 90° right triangles.

- | | |
|---------------------------|---------------------------|
| 19. $\tan 30^\circ$ _____ | 20. $\cos 45^\circ$ _____ |
| 21. $\sin 60^\circ$ _____ | 22. $\cos 60^\circ$ _____ |
| 23. $\tan 45^\circ$ _____ | 24. $\sin 30^\circ$ _____ |

25. A surveyor standing 2,277 ft from the base of a building measured a 31° angle to the topmost point. To the nearest ft, how tall is the building?

