Lesson 9.5 Practice: The Tangent Ratio

School Launch · Geometry · Unit 9: Right Triangles and Trigonometry · Worksheet A

Calculator allowed

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. The leg adjacent to a $63°$ angle in a right triangle is 13. Find the opposite leg (nearest tenth). EASY

2. The leg adjacent to a $39°$ angle in a right triangle is 5. Find the opposite leg (nearest tenth). EASY

3. The leg adjacent to a $58°$ angle in a right triangle is 20. Find the opposite leg (nearest tenth). EASY

4. The leg adjacent to a $22°$ angle in a right triangle is 6. Find the opposite leg (nearest tenth). MEDIUM

5. The leg adjacent to a $43°$ angle in a right triangle is 23. Find the opposite leg (nearest tenth). MEDIUM

6. The leg adjacent to a $19°$ angle in a right triangle is 14. Find the opposite leg (nearest tenth). MEDIUM

7. The leg adjacent to a $50°$ angle in a right triangle is 30. Find the opposite leg (nearest tenth). MEDIUM

8. A right triangle has legs 19 (opposite $\angle A$) and 15 (adjacent). Find $m\angle A$ to the nearest tenth of a degree. HARD

9. A right triangle has legs 7 (opposite $\angle A$) and 6 (adjacent). Find $m\angle A$ to the nearest tenth of a degree. HARD

10. A right triangle has legs 10 (opposite $\angle A$) and 15 (adjacent). Find $m\angle A$ to the nearest tenth of a degree. HARD