Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_

**7.3D Pythagorean Theorem Review Problems\_Classwork**

*Objective: Apply the Pythagorean Theorem to real-life application(CCSS: 8.G.8)*

*HW: worksheet 7.3D HW*

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| 1. Find the length of the hypotenuse of the triangle. Keep answer as a fraction.

$$\frac{8}{9}$$$$\frac{2}{3}$$ |
| 1. The volume V of a cylindrical can is represented by the formula $V=πr^{2}h$, where h is the height and r is the radius. A cylindrical can has a volume of $2250π$ cubic centimeters and a height of 10 centimeters. What is the radius of the can?
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| 1. Two groups of hikers leave the same camp heading in opposite directions. The first group travels 3 miles north and 5 miles east. The second group travels 2 miles south and 4 miles west.
2. Draw the situation in the coordinate plane using a right triangle. Use the origin as the camp location, and let each unit represent 1 mile.
3. Determine the distance between the two groups after the hikes. Round answer to the nearest tenth if necessary.

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| **EXAMPLE PROBLEM:** The base of a triangular prism is an isosceles right triangle with a hypotenuse of $\sqrt{288}$ centimeters. The height of the prism is 8 centimeters. Find the surface area of the triangular prism. Round your answer to the nearest tenth.Image result for volume of isosceles right angled triangular prism |
| 1. The base of a triangular prism is an isosceles right triangle with a hypotenuse of $\sqrt{32}$ centimeters. The height of the prism is 7 centimeters. Find the surface area of the triangular prism. Round your answer to the nearest tenth.

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