

Setting Up and Solving Various Types of Word Problems

Set up and solve.

1. Twice a number less 7 is equal to three times the difference of the number and 4. Find the number.
2. The sum of the length and the width of a rectangle is 8 feet. The length is 2 feet more than the width. Find the perimeter and the area of the rectangle.
3. The legs of a right triangle are given by two consecutive integers. Find the length of the hypotenuse of the triangle if it is 9 more than the shorter leg.
4. Seven packages of sugar cookie dough and 5 packages of double chocolate cookie dough sold for \$92. Fourteen packages of sugar cookie dough and 11 packages of double chocolate cookie dough sold for \$194. What is the cost of one package of each type of cookie dough?
5. Kimberly left David's house and traveled towards the beach. One hour later David left traveling 5 mph faster trying to catch up to her. After 4 hours David caught up. What was Kimberly's average speed?
6. A boat traveled 364 miles downstream and back. The trip downstream took 13 hours while the trip back took 26 hours. Find the speed of the boat in still water and the speed of the current.
7. A chemist wants to make 15 liters of a 50% acid solution by mixing together a 30% acid solution and a 60% acid solution. How much of each solution must he use?
8. Bronze which costs \$4/kg is made by combining copper which costs \$3/kg with tin which costs \$7/kg. Find the number of kg of copper and tin required to make 12 kg of bronze.

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1. 5
2. perimeter is 16 ft; area is 15 sq ft
3. 29
4. \$6 for sugar cookie dough and \$10 for double chocolate cookie dough
5. 20 mph
6. boat: 21 mph; current: 7 mph
7. 5 liters of 30% and 10 liters of 60%
8. 9 kg of copper, 3 kg of tin