

Miscellaneous Problems

Do ALL Work with paper and pencil /it is helpful to make a chart for some
NO CALCULATOR use /Check answers below

1. Tom travels 150 miles in the same time that Jerry travels 250 miles. If Tom's rate is 20 mph less than Jerry's rate, find Tom's rate.
2. The shortest side of a right triangle is 2 cm shorter than the second side. The hypotenuse is 6 cm shorter than twice the second side. What is the length of the second side?
3. The sum of the reciprocals of two consecutive integers is 17 times the reciprocal of their product. Find the larger integer.
4. Gumby earned \$42,000 in royalties on his book. He invested part at 15% and part at 12%, earning a total of \$5,790 per year interest. How much did he invest at 12% ?
5. The width of a rectangle is 8 meters less than the length. The area of the rectangle is 48 square meters. Find the perimeter of the rectangle.
6. Otis has a box of 44 coins consisting of pennies, dimes, and quarters. The number of pennies is equal to the number of dimes, and to the number of dimes. The total value is \$4.37. How many of each denomination of each coin does he have in the box?
7. The length of a rectangle is 3 m less than twice the width. The perimeter of the rectangle is 42 m. Find the length and width of the rectangle.
8. Find four consecutive odd integers such that the sum of the first three exceeds the fourth by 18.
9. Luke works at an ice cream shop. At the end of his shift, he counted the bills in his cash drawer and found 119 bills with a total value of \$347. If all of the bills are \$5 bills and \$1 bills, how many of each denomination were in his cash drawer?
10. After a discount of 37%, the sale price for a *Harry Potter* paperback boxed set by J.K. Rowling was \$35.87. What was the regular price of the set of books to the nearest cent?

Answers:

1. 30 mph
2. 8 cm
3. 9
4. \$17,000
5. 32 meters
6. 17 pennies, 17 dimes, 10 quarters
7. length 13 m /width 8 m
8. 9, 11, 13, 15
9. 57 \$5 bills /62 \$1 bills
10. \$56.94