

1. 171, 173, 175 2. 4', 10', 20' 3. 12° , 29° , 139° 4. 19.5° , 70.5° 5. $W = 7'$ and $L = 21'$ 6. 18 dimes, 39 quarters

7. 45 \$5 bills and 25 \$20's 8. 166 students and 257 students 9. \$540 10. \$2250 @7% and \$4750 @11%

11. 13 and 41 12. 9, 25, and 50 13. 40.5° , 40.5° and 99° 14. length = 14

(3.3 and 3.5) 1. ~1016 square inches 2. $A = 2wh + 2lh + lw$ 3. \$48 4. \$15,000 5. \$57.80

Math 112

Verbal design opportunities (3.4 - 3.5)

Set up an equation and solve for each problem.

Numbers, Rope, Angles, and Perimeter

1. The sum of three consecutive odd numbers is 519. Find all three numbers.
2. A 34 foot rope is cut into three pieces. The second piece is 2 feet less than three times the first piece. The third piece is twice the length of the second. Find all three lengths.
3. The second angle of a triangle is 5 degrees more than twice the first angle. The remaining angle is 6 degrees less than five times the second angle. Find all three angles.
4. One angle is 12 degrees more than three times its complement. Find both angles.
5. The length of a rectangle is 7 feet more than twice its width. If its perimeter is 56 feet, find both dimensions.

Tickets, Coins, and Interest

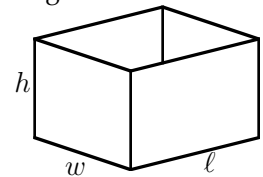
6. A parking meter is filled with \$11.55 worth of quarters and dimes. If there are a total of 57 coins, how many of each kind are there?
7. A cash drawer is filled with \$5 bills and \$20 bills. If there are a total of 70 bills in all and the total value of the bills is \$725, how much of each bill is there?
8. 423 tickets are sold to a baseball game. Student tickets are \$3 and non-student tickets are \$5.50. If the total sales on the game amount to \$1911.50, how many of each ticket re sold? How much did they make from the students?
9. You have \$11,000 to invest. If you invest \$5000 at 6% simple interest and the rest at 4% simple interest, how much money will you make from the interest at the end of the year?
10. Your friend invests \$7000 in two mutual funds. One fund pays 11% simple interest and the other pays 7% simple interest. If the total interest at the end of the year is \$680, how much did she invest at each rate?

More:

11. One number is 2 more than three times another. If their sum is 54, find both numbers.
12. A 84 foot rope is cut into three pieces. The second piece is 2 feet less than 3 times the first and the third piece is twice as long as the second. Find the lengths of all three pieces.
13. Two of the angles of a triangle are the same size while the third is 18° more than the sum of the other two angles. Find all three angles.
14. The length of a rectangle is 8 less than twice the width. If the perimeter is 50 feet, what is the length?

3.3 and 3.5 practice

1. If the circumference of a circle is 113 inches, what is its area?
2. Determine a formula for the surface area, A , of the rectangular box shown in the figure below.



3. The tax in San Mateo county is 8.25%. If you buy a jacket and pay \$3.96 tax, how much was the jacket?
4. If the price of a car was marked down 20% so that the discounted price is \$12,000, how much was the original price?
5. If the price of a sweater, including 9% tax, is \$63, how much was the price tag on the sweater?