

MATH TEST EXPLANATION HELPS

Test 1

1. Add
2. Multiply \$7000 by 10% and subtract the result from \$7000. Or multiply \$7000 by 90%
3. Convert to twenty-fourths and add. Reduce
4. The total is 6 miles plus the distance from George's house to Robert's house—which is 3 miles.
5. Substitute the known in the formula for finding the area of a circle, $A = \pi r^2$.
6. Substitute the given values for the letters and multiply, add, and subtract as directed.
7. Only this set contains all the elements in set B.

Test 2

1. A set whose elements are contained in a larger set is a subset.
2. The “answer” in division is called a quotient.
3. Bimonthly means twice a month. Double the wages, then divide by 3 to find the amount of rent.
4. Add the prices and divide by 3 to find the average.
5. Work this problem using the formula $V = lwh$.
6. Solve the problem by using the formula $A = lw$. To find the missing factor, the formula is rearranged to read $w = A/l$ and the known values are substituted.

Test 3

1. The elements 2 and 3 are the only ones in both the sets.
2. Add 12 to both sides of the equation.
3. Divide the amount spent on food by the total income.
4. Substitute the given values into the formula $A = \frac{1}{2} bh$.
5. The series is composed of consecutive odd numbers. The tenth term of the series is 19.

6. $I = prt$
= $\$800 \times .12 \times 2 - \192
= $\$800 + \$192 = \$992$
7. Substitute the known values in the formula for finding the volume of a cylinder, $V = \pi r^2 h$.

Test 4

1. Add the pounds. Add the ounces. Convert the ounces to pounds. Total the pounds, Convert the remaining ounces to a decimal fraction (.375 pounds). Multiply the total pounds (17.375) by the cost per pound. Round off to the nearest cent.
2. Add the kilograms. Multiply the cost per kilogram by the total kilograms. Round off to the nearest cent. Note: Compare the ease and simplicity of the three steps of the metric system in the second problem to the seven steps of the English system in the first problem.
3. An isosceles triangles has two sides equal and two angles equal.
4. The interior angles of all types of triangles add up to 180° .
5. A polygon is a closed figure formed by straight line segments all in the same plane. The line segments intersect only at their end points and only two line segments intersect at any one point.
6. The perimeter of all polygons is determined by the sum of the length of the sides of the figure.