

Quiz 5 on Using Formulas to Solve Problems

Instructions: Solve the following problems. Be sure to state the unknown, what is given with a list or a diagram, and the required formula.

1) A plane traveling at 550 miles per hour crossed the Atlantic Ocean in $8\frac{1}{2}$ hours. How far did it travel?	2) Find the perimeter and area of a parallelogram with bases of 18", a height of 8", and sides of 10".
3) What is the perimeter of a triangle with sides of 3, 4, and 5 inches? Extra credit! What is the special name of this type of triangle?	4) Find the circumference and area of a circle with a diameter of 8 inches.
5) Find the height of a triangle with a base of 12 inches and an area of 36 square inches.	6) Find the perimeter and area of a rectangular figure 5 inches long and 4 inches wide.

7) Find the perimeter and area of a trapezoid with bases of 21 and 9 inches, sides of 8 inches, and a height of 7 inches.

8) What is the radius of a circle having an area of 113.04 square inches?

9) A rectangular box has dimensions of $8'' \times 8'' \times 5\frac{1}{2}''$. Find the volume of this box.

10) Find the volume of a cylinder with a 4-inch radius and a height of 8 inches.

11) Find the hypotenuse of a right triangle with a base of 3 inches and a height of 4 inches.

12) Find the base of a right triangle with a height of 5" and a hypotenuse of 13".

<p>13) How much interest will \$300 earn over four years with a simple interest rate of 8 percent per year?</p>	<p>14) How long would it take a \$200 bank account earning 8% simple interest to earn \$40 interest?</p>
<p>15) Find the profit of a business with revenue of \$56,000,000 and costs of \$42,000,000.</p>	<p>16) Betty received a \$1.89 discount on a CD which normally sells for \$14.95. What was the sale price?</p>
<p>17) What is the unit price of 4 Cokes selling for \$1.84?</p>	<p>18) It seems very hot when the Fahrenheit temperature goes over 100 degrees. Find the equivalent Celsius temperature.</p>

See page 228 for the complete solutions to these quiz problems.