Sample Placement Test Questions

Mathematics Assessment
The math section of the Placement test will assess students’ arithmetic and pre-algebra skills. Success on this assessment will demonstrate that you have the basic math skills of students who have a well-rounded secondary-level education. This section will contain 24 multiple choice questions.

Sample Questions

1. Basic Computation.

Compute the values.

a. $692 + 73 - 31 + 8 - 80 =$

b. $155.57 + 82 - 42.6 =$

c. $0.8517 + 7.599 =$

d. $618 \times 435 =$

e. $\frac{760203}{3}$

f. $143 - 2(50) + 6^2 =$

g. $8 (15 + 5 - 4^2) \div (9 + 7) =$
2. Fractions and Mixed Numbers

a. Complete the Table.

<table>
<thead>
<tr>
<th>Fraction</th>
<th>Decimal</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.015</td>
<td></td>
</tr>
<tr>
<td>( \frac{2}{5} )</td>
<td></td>
<td>280%</td>
</tr>
<tr>
<td>( \frac{75}{100} )</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. Add, Subtract, Multiply, or Divide as indicated (express answers as fractions or whole numbers when applicable)

\[
\frac{3}{8} + \frac{5}{12} =
\]

c. Give answers as mixed numbers with the fractional part in lowest terms.

\[
14 \frac{1}{4} - 6 \frac{5}{12} =
\]

\[
1 \frac{1}{2} \cdot 2 \frac{2}{7} =
\]

\[
4 \frac{2}{9} \div 7 \frac{3}{5} =
\]
3. Place Value and Rounding

a. 1475.0953 to the nearest Ones =

b. 1475.0953 to the nearest Thousands =

c. 1475.0953 to the nearest Hundredths =

d. Write the word name.
   12,253,782 ________________________________
   _________________________________________
   48,923.0095 ________________________________
   _________________________________________

e. Write the number.
   Thirty-two Million, Four Hundred Two Thousand, Seventy-eight,
   and One Hundred Thirteen Thousandths

   Eight Trillion

4. Beginning Algebra

Solve the equations

a. \( \frac{7}{12} = \frac{35}{x} \)

b. What is 38% of 60?
c. What percent of 10 is 38?

d. The sales tax rate in Pennsylvania is six percent. What is the tax on a five hundred twelve-dollar television?

e. The formula for simple interest is: \( I = P \cdot r \cdot t \), if you invest $3500 at a rate of 5% for 2 years, how much interest have you earned?

5. Real Number Arithmetic (computation involving positive and negative values)

a. \( 12 - 29 = \)

b. \( 3 - (-2) = \)

e. \( 7(-9) = \)

f. \( -28 \div 2 = \)

g. \( -100 + (-55) = \)