Math 63 Practice Final Exam
Date of Final: ________________ Time of Final: ________________ Location of Final: ________________

Bring Scantron (large or half-sheet pink form) and a pencil to the final exam.

You will be required to memorize area and perimeter formulas for the following shapes: triangle, rectangle, square, parallelogram, circle and trapezoid. You will also need to memorize the linear conversions from American to American units and metric to metric units.

Answer the question.

1) What does the digit 4 mean in the number 247,189?

Add.

2) 341 + 5829

Find the perimeter of the figure.

3) Maria needs to replace all the fencing around her horse pasture. How many meters of fencing will she need?

\[ \text{Perimeter} = 99 + 79 + 120 + 128 = 426 \text{ meters} \]

Divide.

4) \( \frac{8593}{696} \)

Solve.

5) 5 + y = 821

6) 2630 \times 456

Round to the nearest thousand.

7) 62 ft

8) \( 36 \div 28,721 \)

9) 171 + y = 821

10) 128 \cdot m = 22,528

Solve the problem.

11) Each box of matches contains 210 matches. Boxes of matches are shipped in cartons. Each carton contains 15 boxes of matches. How many matches are in each carton?

Simplify.

12) \( 9^2 - 4 \cdot 7 \)

13) \( 5 \cdot (3 + 2)^2 - 2 \cdot (5 - 3)^2 \)

Find the average.

14) Scores on a math test: 77 49 77 93 49

Find the prime factorization of the number.

15) 198

Determine whether the number is divisible by 2, 3, 4, 5, 6, 8, 9, and/or 10.

16) 161,809
What part of the set of objects is shaded?

Multiply.
17) \( \frac{2}{7} \cdot 10 \)

18) \( \frac{2}{5} \cdot \frac{3}{7} \)

Simplify.
20) \( \frac{120}{135} \)

Multiply and simplify.
21) \( \frac{9}{16} \cdot \frac{8}{16} \)

22) \( 63 \cdot \frac{4}{7} \)

Divide and simplify.
23) \( \frac{2}{9} \div \frac{7}{3} \)

24) \( \frac{7}{8} \div 7 \)

Solve and simplify.
25) \( \frac{5}{6} \cdot t = 65 \)

Find the least common multiple of the set of numbers.
26) 24, 18, 28

Add and simplify.
27) \( \frac{1}{9} + \frac{5}{9} \)

28) \( \frac{1}{6} + \frac{1}{7} \)

29) \( \frac{1}{4} + \frac{5}{16} + \frac{4}{8} \)

Subtract and simplify.
30) \( \frac{6}{8} - \frac{1}{3} \)

Use < or > for \( \square \) to write a true sentence.
31) \( \frac{3}{8} \square \frac{3}{11} \)

Solve and simplify.
32) \( \frac{2}{4} + m = \frac{5}{6} \)

Convert to a mixed numeral.
33) \( \frac{15}{4} \)

Add. Write a mixed numeral for the answer.
34) \( \frac{6}{6} + 4 \cdot \frac{4}{9} \)

Subtract. Write a mixed numeral for the answer.
35) \( 20 \frac{3}{7} - 7 \frac{1}{3} \)

36)
\( \frac{14}{7} - 6 \frac{6}{7} \)

Divide. Write a mixed numeral for the answer.
37) \( \frac{5}{7} \div 4 \frac{1}{3} \)

Write fraction notation for the given decimal notation. Do not simplify.
38) 0.350
Write in decimal notation.
39) \frac{188}{100}

Answer the question.
40) Which number is larger?
A) 0.09999
B) 0.1

Round to the indicated place value.
41) Round to the nearest hundredth: 18.33558

Add.
42) 3.7 + 0.619 + 45

Subtract.
43) 11.2 - 3.32

Multiply.
44) \times 8.8

Divide.
46) 15.25 \div 2.5

47) 36 + 0.06

48) \frac{18.144}{100}

Write the fraction in decimal notation.
49) \frac{13}{16}

50) \frac{8}{15}

Write as a decimal number rounded as indicated.
51) \frac{27}{11}; Round to the nearest tenth.

Estimate by rounding as directed.
52) 55.037 - 1.8934; nearest one

Solve the problem.
53) A rectangular garden measures 19.8 feet by 55.2 feet. What is its area?

54) A restaurant bill of $65.25 was shared equally by 4 people. How much was each person's share? Round your answer to the nearest cent.

Simplify the ratio.
55) 12 to 15

Solve the problem.
56) An 8-oz bottle of hair spray costs $3.70. Find the unit price in cents per ounce.

Solve.
57) \frac{2}{19} = \frac{6.2}{y}

58) \frac{9}{x} = \frac{10}{5}

Use a proportion to solve the problem.
59) Jim drove 176 miles in 4 hours. If he can keep the same pace, how long will it take him to drive 528 miles?

The two triangles below are similar. Find the missing lengths.
60)
Find decimal notation.
   61) 35%
   62) 640%

Find percent notation.
   63) \( \frac{8}{10} \)
   64) \( \frac{7}{4} \) Round to the nearest tenth, if necessary.

Find fraction notation and simplify.
   65) 8%

Translate to an equation and solve.
   66) What is 25% of 700?
   67) $18 is 5% of what?

Translate to a proportion and solve.
   68) What percent of 72 is 18?
   69) $18 is 8% of what?

Solve the problem.
   70) Alex and Juana went on a 30-mile canoe trip with their class. On the first day they traveled 27 miles. What percent of the total distance did they canoe?

   71) On a test, Manuel answered incorrectly 72 questions or 45% of the questions. How many questions were on the test?

Solve.
   72) On a biology test, a student got 25 questions correct but did not pass. On a second attempt, the student got 34 questions correct. What was the percent of increase?

Solve the problem.
   73) A camera costs $610. If the sales tax rate is 7%, how much tax is charged and what is the total price? Round your answers to the nearest cent.

Complete.
   74) 132 in. = ____ ft
   75) 87 km = ____ m
   76) 9 wk = ____ days
   77) 2 ft² = ____ in²

Find the perimeter of the polygon.
   78) A rectangle measuring 11 cm by 12 cm

Find the area.
   79) \[
   \begin{array}{c}
   \text{4} \frac{1}{2} \text{ cm} \\
   \text{4} \frac{1}{2} \text{ cm}
   \end{array}
   \]

80) \[
\begin{array}{c}
\text{16 yd} \\
\text{22 yd}
\end{array}
\]
**Answer Key**

**Testname: MATH 63 PRACTICE FINAL2**

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<tr>
<td>1)</td>
<td>4 ten thousands</td>
<td>34)</td>
<td>$11 \frac{5}{18}$</td>
<td>73)</td>
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<tr>
<td>2)</td>
<td>6170</td>
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<td>3)</td>
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<td>1,199,280</td>
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<td>7)</td>
<td>15,376 sq ft</td>
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<td>11)</td>
<td>3150 matches per carton</td>
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<td>$2 \cdot 3 \cdot 3 \cdot 11$</td>
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