5th Grade into 6th Grade Math I Summer Homework

Addition and Subtraction: Find the sum and difference of the two numbers in each problem without a calculator. Show all work.

652 + 726 + 7.75 + 51.4 + 2.86
+345 + 268 +1.46

407 + 7,007 + 80.401 + 75.89 - 9.4
-198 - 198 -44.23

Multiplication and Division: Find the product and quotient of the two numbers in each problem. Do not use a calculator. Show all work. If there is a remainder, state the remainder as R = ____.

65 x 4 = 84 x 39 =

591 ÷ 7 = 264 ÷ 2 =
**Rounding:** Underline the given place value. Look to the right. If this digit is 5 or greater, increase the underlined digit by 1. If the digit to the right is less than 5, keep the underlined digit the same. *Round to the nearest…*

- ten 3,479 ______
- hundred 7,553 ______
- one 3.568 ______
- ten 162.21 ______
- one 14.36 ______
- thousand 97,054 ______

**Comparing Decimals:** Use the signs >, <, or =.

- 0.205 〇 0.21
- 0.03 〇 0.03
- 0.04 〇 0.050
- 1.0 〇 0.1000
- 0.52 〇 0.500
- 0.41 〇 0.405

**Comparing Fractions:** Compare each pair of numbers. Write the correct comparison symbol (<, >, or =) in each circle. Make sure you have common denominators (or some other method to compare) before writing the inequality symbol.

- \( \frac{3}{8} \) 〇 \( \frac{5}{8} \)
- \( \frac{3}{4} \) 〇 \( \frac{3}{8} \)
- \( \frac{3}{7} \) 〇 \( \frac{1}{4} \)
- \( \frac{7}{8} \) 〇 \( \frac{3}{4} \)

**Simplifying Fractions:** Simplify the following fractions. If the fractions are improper, change them to mixed numbers then simplify.

- \( \frac{14}{28} \)
- \( \frac{15}{55} \)
- \( \frac{12}{100} \)
- \( \frac{5}{10} \)
- \( \frac{15}{20} \)
- \( \frac{20}{25} \)
Ordering Fractions: Order the following fractions from least to greatest. Make sure you have common denominators (or some other method to compare) before ordering the fractions.

\[
\frac{1}{5}, \frac{4}{5}, \frac{1}{10}, \frac{6}{10}, \frac{7}{10}
\]

\[
\frac{1}{2}, \frac{1}{4}, \frac{1}{6}, \frac{1}{3}, \frac{1}{5}
\]

Factors: List all the factors for each number. (Numbers that can be multiplied together to get to the numbers listed below)

18: ________________________________________

30: ________________________________________

23: ________________________________________

Multiples: List the first 5 multiples of each number. (Multiply 1-5 by the numbers listed below)

8: ________________________________________

12: ________________________________________

Area: The number is square units needed to cover a region is the area (square units). The formula is \( A = l \times w \). For each problem, copy the formula, substitute the length and width, and solve. Write your answer with square units.

\[
A = \_\_\_\_\_\_\_
A = \_\_\_\_\_\_
A = \_\_\_\_\_\_
\]
Adding and Subtracting Fractions and Mixed Numbers: Add or subtract the following fractions. Make sure you have common denominators before adding or subtracting. Remember, you only add or subtract the numerator (top number) and keep the denominator (bottom number) the same. Simplify your final answers.

\[
\frac{6}{10} + \frac{3}{10} = \quad \frac{3}{8} + \frac{2}{8} = \quad \frac{1}{12} + \frac{4}{6} =
\]

\[
\frac{8}{12} - \frac{3}{12} = \quad \frac{7}{10} - \frac{2}{4} = \quad \frac{4}{5} - \frac{1}{4} =
\]

Multiplying Fractions: Multiply the following fractions. Multiply the numerators, then multiply the denominators. Simplify if necessary.

\[
\frac{3}{4} \times \frac{1}{3} = \quad \frac{2}{5} \times \frac{5}{8} = \quad \frac{7}{8} \times 2 =
\]

Quadrilaterals: Identify the quadrilateral described.

I am a two-dimensional figure that has four sides. I have four 90 degree angles. I have two sets of parallel lines. I also have two sides that are one length and my other two sides are a different length. Who am I? ____________________________________________________________________

I am a two-dimensional shape that has four sides. I have two obtuse angles and two acute angles. I have two different sets of parallel sides. I also have two sides that are one length, and my other two sides are a different length. Who am I? ____________________________________________________________________

I am a two-dimensional shape that has four 90 degree angles. I have four sides that are all the same length. I have two pairs of parallel lines. Who am I? ____________________________________________________________________

I am a two-dimensional shape that has four sides, two pairs of parallel lines and all sides are equal. Who am I? ____________________________________________________________________

I am a two-dimensional shape that has four sides and exactly one pair of parallel lines. Who am I? ____________________________________________________________________
Conversions: Convert the following customary units.

4 feet and 3 inches = _________ inches

3 yards = _________ feet

3 meters = _________ centimeters

2 kg = _________ grams

2 tons = _________ pounds

1 pound and 7 ounces = _________ ounces

81 minutes = _________ hours and _________ minutes

1 hour and 38 minutes = _________ minutes

Graphing: Use the graph to answer the questions.

This bar graph shows David's savings for five months.

(a) David saved $_______ in August.

(b) He saved the least money in _________.

(c) In _________ he saved twice as much as in November.

(d) He saved $_______ more in October than in July.
**Graphing**: Draw a dot on the location of the coordinates. Name the point with the letter. Remember: The coordinates are in the order of (x, y).

- A: (1, 3)
- B: (5, 7)
- C: (9, 10)
- D: (0, 2)
- E: (6, 8)

**Order of Operations**: Solve the following problems. Show your work. Be sure to follow the order of operations. PEMDAS (parentheses, exponents, multiplication, division, addition and subtraction (multiplication and division in order of appearance) (addition and subtraction in order of appearance).

1. \(15 \times 8 - 3 = \)  
2. \((30 + 8) \times 6 - 1 = \)

3. \(36 - 5(16 - 11) = \)  
4. \(25 + 18 \div 6 - 1 = \)