Name: answers

5th Grade into 6th Grade Math Summer Homework

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

652 + 345 = 997

726 + 268 = 994

7.75 + 1.46 = 9.21

51.4 + 2.86 = 54.26

407 − 198 = 209

7,007 − 198 = 6809

80.401 − 44.23 = 36.171

75.89 − 9.4 = 66.49

Multiplication and Division: Find the product or 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 = 260

84 x 39 = 3276

591 ÷ 7 = 84 R3

264 ÷ 12 = 22

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…*

tenth 0.3479 .3

hundredth 0.7553 .76

whole number 3.268 3

ten 162.21 160

thousandth 0.0036 .004

hundred 990.54 1,000

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

0.205 < 0.210 .03 = 0.03

0.040 < 0.050 1.0 > 0.1000 (ones → ones, ↑ tenths)

0.520 > 0.500 0.410 > 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.

$\frac{3}{8} < \frac{5}{8}$ $\frac{3}{4} = \frac{6}{8} > \frac{3}{8}$

$\frac{3}{7} = \frac{12}{28} > \frac{1}{4} = \frac{7}{28}$ $\frac{7}{8} > \frac{3}{4} = \frac{6}{8}$

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.

$\frac{2}{10}$ $\frac{8}{40}$

$\frac{1}{5}, \frac{1}{5}, \frac{1}{10}, \frac{6}{10}, \frac{7}{10}$ $\frac{1}{10}, \frac{1}{5}, \frac{6}{10}, \frac{7}{10}, \frac{4}{5}$

$\frac{30}{60}$ $\frac{15}{60}$ $\frac{10}{60}$ $\frac{20}{60}$ $\frac{12}{60}$

$\frac{1}{2}, \frac{1}{4}, \frac{1}{6}, \frac{1}{3}, \frac{1}{5}$ $\frac{1}{6}, \frac{1}{5}, \frac{1}{4}, \frac{1}{3}, \frac{1}{2}$

$\frac{32}{64}$ $\frac{20}{64}$ $\frac{24}{64}$ $\frac{18}{64}$

$\frac{1}{2}, \frac{5}{16}, \frac{30}{64}, \frac{3}{8}, \frac{9}{32}$ $\frac{9}{32}, \frac{5}{16}, \frac{3}{8}, \frac{30}{64}, \frac{1}{2}$

Simplifying Fractions: Simplify the following fractions. If the fractions are improper, change them to mixed numbers then simplify. Show your work!

$\frac{14}{28} \div \frac{14}{14} = \frac{1}{2}$ $\frac{15}{55} \div \frac{5}{5} = \frac{3}{11}$ $\frac{12}{51} \div \frac{3}{3} = \frac{4}{17}$

$\frac{34}{48} \div \frac{2}{2} = \frac{17}{24}$ $\frac{17}{4} = 4\frac{1}{4}$ $\frac{80}{25} = 3\frac{5}{25} = 3\frac{1}{5}$

Factors: List all the factors for each number in numeral order.

18: 1, 2, 3, 6, 9, 18

30: 1, 2, 3, 5, 6, 10, 15, 30

23: 1, 23 (prime)

45: 1, 3, 5, 9, 15, 45

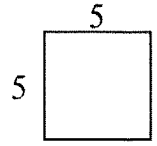
Multiples: List the first 5 multiples of each number.

8: 8, 16, 24, 32, 40

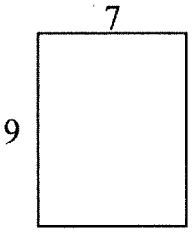
12: 12, 24, 36, 48, 60

24: 24, 48, 72, 96, 120

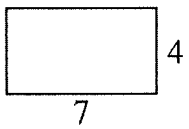
Area: The number of square units needed to cover a region is the area (square units). The formula is A=l x w. For each problem, copy the formula, substitute the length and width, and solve. Write your answer with square units. Show your work!



A = lw
A = 5·5
A = 25u²

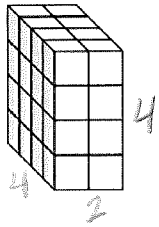


A = lw
A = 7·9
A = 63u²

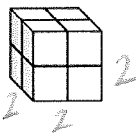


A = lw
A = 7·4
A = 28u²

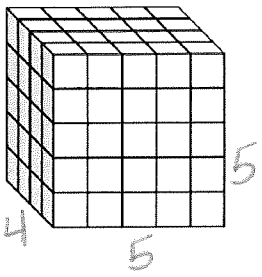
Volume: The amount of space inside a solid figure is the volume of the figure (cubic units). he formula is V=l x w x h. For each problem, copy the formula, substitute the length and width, and solve. Write your answer with cubic units. Show your work!



V= lwh
V = 4·2·4
$32u^3$



V= l·w·h
V = 2·2·2
$8u^3$



V= lwh
V = 4·5·5
$100u^3$

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).

$15 \times 8 - 3 =$

$120 - 3$

117

$(30 + 8) \times 6 - 1 =$

$38 \times 6 - 1$

$228 - 1 = 227$

$36 - 5(16 - 11) =$

$36 - 5(5)$

$36 - 25$

11

$25 + 18 \div 6 - 1 =$

$25 + 3 - 1$

27

$(29 - 18) + 14 \div 2 + 6 =$

$11 + 7 + 6$

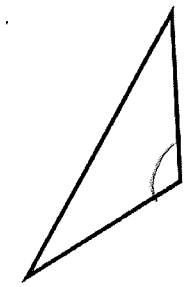
24

$(30 + 8) \times (6 - 1) =$

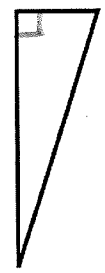
38×5

190

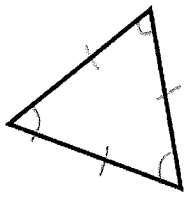
Triangle Types: Label the triangles as acute, obtuse, or right.



obtuse



right



acute

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. Show your work!

$\frac{6}{10} + \frac{3}{10} = \frac{9}{10}$

$2\frac{3}{8} + 1\frac{2}{8} = 3\frac{5}{8}$

Find a common denominator first.

$\frac{1}{9} \times \frac{2}{2} + \frac{5}{6} \times \frac{3}{3} =$

$\frac{2}{18} + \frac{15}{18} = \frac{17}{18}$

$2\frac{8}{12} - 1\frac{3}{12} = 1\frac{5}{12}$

$\frac{7}{10} \times \frac{2}{2} - \frac{2}{4} \times \frac{5}{5} =$

$\frac{14}{20} - \frac{10}{20} = \frac{4 \div 4}{20 \div 4} = \frac{1}{5}$

Simplify

$3\frac{4}{5} \times \frac{4}{4} - \frac{1}{4} \times \frac{5}{5} =$

$3\frac{16}{20} - \frac{5}{20} = 3\frac{11}{20}$

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? a rectangle

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? a parallelogram

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? a square

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

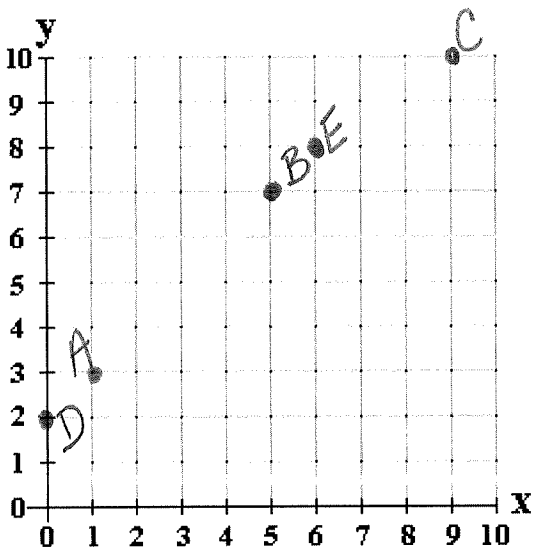
I am a two-dimensional shape that has four sides and exactly one pair of parallel lines. Who am I? a trapezoid

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

$\frac{3}{4} x \frac{1}{3} = \frac{3}{12} \div 3 = \frac{1}{4}$ $\frac{2}{5} x \frac{5}{8} = \frac{10}{40} \div 10 = \frac{1}{4}$

$\frac{7}{8} x 2 = \frac{7}{8} x \frac{2}{1} = \frac{14}{8} = 1\frac{6}{8} \div 2 = 1\frac{3}{4}$

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)

Expressions: Rewrite each question as an algebraic expression. Do not solve it.

Example: What is 4 more than n? n+4

What is the sum of a and 8? a+8

What is the product of y and 10? 10y

What do you get when you subtract 9 from b? b-9

What is c divided by 22? c ÷ 22

What is 12 decreased by p? 12 - p

Conversions: Convert the following customary units.

12 in = 1 ft 4 x 12 = 48 + 3

4 feet and 3 inches = 51 inches

3 ft = 1 yd 3 x 3

3 yards = 9 feet

1 pint and 1 cup = 3 cups $\frac{1}{2}$ pt = 1 cup 1 pt = 2 cups

4 qt = 1 gallon 6 x 4

6 gallons = 24 quarts

2 tons = 4,000 pounds 2000 lbs = 1 ton

16 oz = 1 lb

1 pound and 7 ounces = 23 ounces

81 minutes = 1 hours and 21 minutes

120 min

2 hours and 38 minutes = 158 minutes

60 min = 1 hr