

Rounding.

Round 9,875.678 to the following place values.

1) ten thousands _____

2) thousands _____

3) hundreds _____

4) tens _____

5) ones _____

6) tenths _____

7) hundredths _____

Round 999.999 to the nearest

1) thousand _____

2) hundred _____

3) ten _____

4) whole number _____

5) tenth _____

6) hundredth _____

Operations with Whole Numbers

Perform the following operations.

1) $98 + 874 + 76$ _____

2) $9,004 - 78$ _____

3) $5,301 + 8 + 98 + 10$ _____

4) $10,000 - 1,234$ _____

5) $22,655 \div 23$ _____

6) 985×23 _____

7) 12^3 _____

8) $9 \times 5 \times 6 \times 2$ _____

9) $100 + 10 + 1$ _____

10) 5^4 _____

Operations with Decimals.

Perform the following operations.

1) $0.785 + 2.3 + 0.04$ _____

2) $19.45 - 13.008$ _____

3) $(1.2)^2$ _____

4) 5.06×9 _____

5) $(0.2)^3$ _____

6) $22.54 \div 9.8$ _____

7) $7.05 \div 0.094$ _____

8) $872 - 138.86$ _____

9) $1 + 0.1 + 0.01 + 0.001$ _____

10) $1 - 0.001$ _____

Number Theory

Find the GCF and LCM for each set of numbers.

1) 8, 12 GCF _____ LCM _____

2) 15, 30 GCF _____ LCM _____

3) 9, 16 GCF _____ LCM _____

4) 24, 36, 60 GCF _____ LCM _____

List the first 10 prime numbers. _____

Write the prime factorization for the following numbers.

1) 150 _____

2) 240 _____

3) 420 _____

4) 97 _____

Operations with Fractions.

Perform the following operations. All answers must be in simplest form.

1) $\frac{1}{4} + \frac{2}{5}$ _____

2) $\frac{5}{6} - \frac{1}{3}$ _____

3) $5\frac{3}{7} + 2\frac{1}{8}$ _____

4) $6\frac{4}{5} - 3\frac{2}{3}$ _____

5) $\frac{3}{8} \times \frac{4}{9}$ _____

6) $\frac{5}{6} \div \frac{2}{3}$ _____

7) $4\frac{1}{2} \times 10$ _____

8) $15 \div 1\frac{2}{3}$ _____

9) $5\frac{1}{2} + 4\frac{4}{5}$ _____

10) $9 - 4\frac{3}{7}$ _____

11) $6\frac{1}{3} - 3\frac{5}{6}$ _____

12) $(\frac{2}{3})^3$ _____

Order of Operations

Simplify the following numerical expressions.

1) $19 + (5 - 2)^2 \times 2$ _____ 2) $2^5 \div (8 - 4)^2$ _____

3) $(5^2 + 10^2) \div (3^2 + 4^2)$ _____ 4) $8 \times (12 - 3) \div 6^2$ _____

Measures of Central Tendency and Spread

Find the mean, median, mode, and range for 86, 81, 72, 75, 90, 91, and 86.

Mean _____ median _____

Mode _____ range _____

Geometry

Find the area of the following shapes. Include units. Use 3.14 for π .

1) A square with sides of 6 cm. _____

2) A triangle with a height of 10 mi. and a base of 6 mi. _____

3) A circle with a radius of 8 ft. _____

4) A circle with a diameter of 8 yd. _____

5) A trapezoid with a height of 6.5 m, one base of 11.5 m, and a second base of 21.5 m. _____

6) A square with a perimeter of 20 mm. _____

Geometry continued

Answer the following. Include units. Use 3.14 for π .

1) Find the circumference of a circle with a radius of 10 in. _____

2) Find the circumference of a circle with a diameter of 10 ft. _____

3) Two angles of a triangle are 45° and 65° . What is the measure of the third angle? _____

4) Is the above triangle acute, right, or obtuse? _____

5) List as many different types of quadrilaterals you can name.

6) What is an isosceles triangle?

Ratios and Rates

Use the given information to solve the following problems.

A class has 36 boys and 30 girls.

- 1) What is the ratio of boys to girls? _____
- 2) What is the ratio of girls to boys? _____
- 3) What is the ratio of boys to total students? _____
- 4) What is the ratio of girls to total students? _____

Convert the following to unit rates. Include units.

- 1) 300 miles in four hours. _____
- 2) \$54.89 for 11lbs. _____
- 3) 390 miles on 13 gallons of gas. _____
- 4) Typing 360 words in eight minutes. _____
- 5) 16,000 revolutions in five minutes. _____

Rounding.

Round 9,875.678 to the following place values.

1) ten thousands 10,000

2) thousands ~~10,000~~ 10,000

3) hundreds 9,900

4) tens 9,880

5) ones 9,876

6) tenths 9,875.7

7) hundredths 9,875.68

Round 999.999 to the nearest

1) thousand 1,000

2) hundred 1,000

3) ten 1,000

4) whole number 1,000

5) tenth 1,000.0

6) hundredth 1,000.00

Operations with Whole Numbers

Perform the following operations.

1) $98 + 874 + 76$ 1,048

2) $9,004 - 78$ 8,926

3) $5,301 + 8 + 98 + 10$ 5,417

4) $10,000 - 1,234$ 8,766

5) $22,655 \div 23$ 985

6) 985×23 22,655

7) 12^3 1,728

8) $9 \times 5 \times 6 \times 2$ 540

9) $100 + 10 + 1$ 111

10) 5^4 625

Operations with Decimals.

Perform the following operations.

1) $0.785 + 2.3 + 0.04$ 3.125

2) $19.45 - 13.008$ 6.442

3) $(1.2)^2$ 1.44

4) 5.06×9 45.54

5) $(0.2)^3$ 0.008

6) $22.54 \div 9.8$ 2.3

7) $7.05 \div 0.094$ 75

8) $872 - 138.86$ 733.14

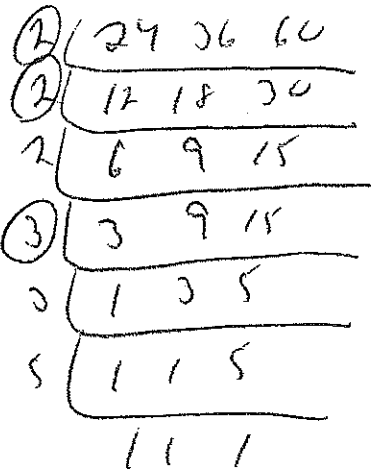
9) $1 + 0.1 + 0.01 + 0.001$ 1.111

10) $1 - 0.001$ 0.999

Number Theory

Find the GCF and LCM for each set of numbers.

1) 8, 12 GCF 4 LCM 24



2) 15, 30 GCF 15 LCM 30

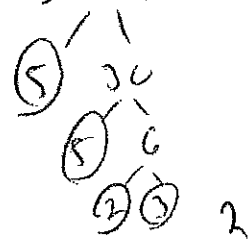
3) 9, 16 GCF 1 LCM 144

4) 24, 36, 60 GCF 12 LCM 360

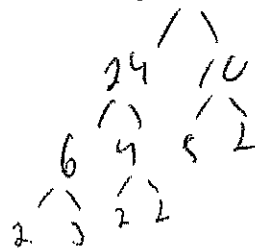
List the first 10 prime numbers. 2, 3, 5, 7, 11, 13, 17, 19, 23, 29

Write the prime factorization for the following numbers.

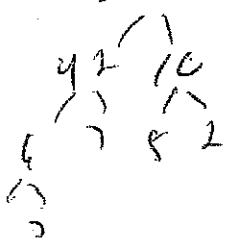
1) 150 $2 \cdot 3 \cdot 5^2$



2) 240 $2^4 \cdot 3 \cdot 5$



3) 420 $2 \cdot 3 \cdot 5 \cdot 7$



4) 97 97

Operations with Fractions.

Perform the following operations. All answers must be in simplest form.

$$1) \frac{1}{4} + \frac{2}{5} \underline{\frac{13}{20}}$$

$$2) \frac{5}{6} - \frac{1}{3} \underline{\frac{1}{2}}$$

$$3) 5\frac{3}{7} + 2\frac{1}{8} \underline{7\frac{31}{56}}$$

$$4) 6\frac{4}{5} - 3\frac{2}{3} \underline{3\frac{2}{15}}$$

$$5) \frac{3}{8} \times \frac{4}{9} \underline{\frac{1}{6}}$$

$$6) \frac{5}{6} \div \frac{2}{3} \underline{1\frac{1}{4}}$$

$$7) 4\frac{1}{2} \times 10 \underline{45}$$

$$8) 15 \div 1\frac{2}{3} \underline{9}$$

$$9) 5\frac{1}{2} + 4\frac{4}{5} \underline{10\frac{3}{10}}$$

$$10) 9 - 4\frac{3}{7} \underline{4\frac{4}{7}}$$

$$11) 6\frac{1}{3} - 3\frac{5}{6} \underline{2\frac{1}{2}}$$

$$12) \left(\frac{2}{3}\right)^3 \underline{\frac{8}{27}}$$

Order of Operations

Simplify the following numerical expressions.

1) $19 + (5 - 2)^2 \times 2$ 37
 $19 + 3^2 \times 2$
 $19 + 9 \times 2$
 $19 + 18$

2) $2^5 \div (8 - 4)^2$ 2
 $32 \div (4)^2$
 $32 \div 16$

3) $(5^2 + 10^2) \div (3^2 + 4^2)$ 5
 $(25 + 100) \div (9 + 16)$
 $125 \div 25$

4) $8 \times (12 - 3) \div 6^2$ 2
 $8 \times (9) \div 36$
 $72 \div 36$

Measures of Central Tendency and Spread

Find the mean, median, mode, and range for ~~86, 81, 72, 75, 90, 91,~~
and ~~86.~~ Σ = 501

Mean 83 median 86

Mode 86 range 19

72 75 81 86 86 90 91

Geometry

Find the area of the following shapes. Include units. Use 3.14 for π .

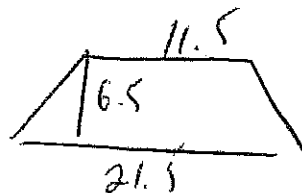
1) A square with sides of 6 cm. 36 cm²

2) A triangle with a height of 10 mi. and a base of 6 mi. 30 mi²

3) A circle with a radius of 8 ft. 200.96 ft²

4) A circle with a diameter of 8 yd. 50.24 yd²

5) A trapezoid with a height of 6.5 m, one base of 11.5 m, and a second base of 21.5 m. 107.25 m²



6) A square with a perimeter of 20 mm. 25 mm²

Geometry continued

Answer the following. Include units. Use 3.14 for π .

1) Find the circumference of a circle with a radius of 10 in. 62.8 in

2) Find the circumference of a circle with a diameter of 10 ft. 31.4 ft

3) Two angles of a triangle are 45° and 65° . What is the measure of the third angle? 70°

4) Is the above triangle acute, right, or obtuse? acute

5) List as many different types of quadrilaterals you can name.

Parallelogram

Kite

Trapezoid

Rhombus

Rectangle

Square

6) What is an isosceles triangle? A triangle with at least two congruent (equal) sides

Ratios and Rates

Use the given information to solve the following problems.

A class has 36 boys and 30 girls.

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- 1) What is the ratio of boys to girls? 6 to 5
- 2) What is the ratio of girls to boys? 5 to 6
- 3) What is the ratio of boys to total students? 6 to 11
- 4) What is the ratio of girls to total students? 5 to 11

$$\frac{36}{66}$$

Convert the following to unit rates. Include units.

- 1) 300 miles in four hours. 75 mph
- 2) \$54.89 for 11lbs. \$4.99/lb
- 3) 390 miles on 13 gallons of gas. 30 mpg
- 4) Typing 360 words in eight minutes. 45 wpm
- 5) 16,000 revolutions in five minutes. 3200 rpm