

- 1: Evaluate this expression: $\frac{x+y}{7}$ for $x=7$ and $y=21$

- 2: What is the solution to this equation: $x + 17 = 32$?

- 3: Give an example of an EXPRESSION and give an example of an EQUATION .

- 4: Write an algebraic expression for this sentence “ One third of some number”

- 5: Write an algebraic expression for this sentence “ Five less than the product of two numbers”

- 6: Write an algebraic expression for this sentence “ Five times the sum of some number and six”

- 7: Translate this sentence to an algebraic equation “ Some number minus six is 15”

- 8: Evaluate the ratio of 8 and 5.

- 1: This $x + 5 = 5 + x$ is an example of which algebraic law?

- 2: This $5(x + y) = 5x + 5y$ is an example of which algebraic law?

- 3: Multiply: $7(x + y + 2)$

- 4: Identify the factors in this expression: $3m(a - b)(x - y)$

- 5: A typical grouping symbol is $\{ \}$. List four more grouping symbols.

- 6: The area of a triangle is $A = \frac{1}{2}bh$ where A is the area, b is the base and h is the height. Draw the triangle and identify the base and height. If the base is 24 cm and the height is 12 cm what is the area? What are the units of the area?

- 7: Factor this expression $44x + 22m + 11q$

1: Express 56 as a product of its PRIME factors

2: List all factors of 24.

3: List the first four whole numbers.

4: In a fraction such as $\frac{a}{b}$ what is the top number (a) called.? What is the bottom number (b) called?

Top Number _____ Bottom number _____

5: What is the product of these two fractions: $\frac{1}{3} \bullet \frac{x}{4}$

6: Divide these fractions . Simplify if possible. $\frac{5}{12} \div \frac{5}{2}$

7: Simplify this fraction: $\frac{30}{24}$

8: Add and simplify these fractions: $\frac{4}{9} + \frac{23}{9}$

9: Perform the indicated operation: $\frac{10}{15} - \frac{2}{3}$

- 1: Graph this number, $\frac{3}{5}$, on a number line

- 2: Arrange these numbers in ascending order: $-\sqrt{2}$, π , 0 , 17.8 , -19 , $\frac{3}{4}$, $-\frac{4}{7}$, 1

- 3: What is the definition of a rational number (in words)? Give three examples.

- 4: Is $\frac{4}{0}$ a rational number. Why is it or why is it not a rational number?

- 6: Convert $-\frac{1}{8}$ to decimal notation.

- 7: Find the absolute value of $-|-34|$

- 8: Write an equation for the sentence “x is less than or equal to 5”.

- 9: Identify the rational numbers in this list: $-2, 0, \sqrt{3}, \pi, 5 \div 3, \sqrt{9}$

1: Draw a number line and , using this line, add $5 + (-2)$

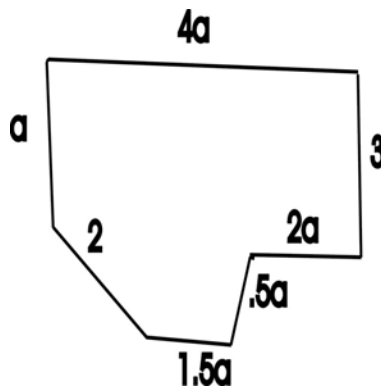
2: Draw a number line and subtract $4 - (0)$

3: Draw a number line and add $-3 + (-2)$

4: Judy's phone bill was \$63.50. She sent a check for \$50.00 to the phone company then ran up \$47.00 in new charges. How much does she now owe the phone company?

5: Evaluate this expression for $x=1$. Then add these terms. $-3 + 4x + 5 - 2x + 6 + 11x$. Now evaluate your answer for $x=1$.

6: Find the perimeter of this figure:



1: Add: $-10.1 - 2.6$

2: What number is the opposite of 14.2 ?

3: Add: $0 - (5)$

4. Evaluate $-x$ if $x = -8$

5: Add: $\frac{-1}{5} - \frac{3}{5}$

6: Add: $0.017 - 3$

7: Add: $-\frac{4}{17} - \left(-\frac{9}{17}\right)$

8: Add $6x + 3$ and $-6x + 2$

9: Subtract 38 from -8

SHOW YOUR WORK

1. Multiply: $7 \bullet (-5)$

2. Multiply $7(-2)(2)(-3)\left(-\frac{3}{2}\right)$

3. Divide $-10.2 \div (-2)$

4. Divide $8 \div \left(-\frac{2}{3}\right)$

5. Multiply $\frac{-2}{13} \div \left(-\frac{2}{13}\right)$

6. Find the reciprocal of 0

7. Multiply $\frac{9.7(-2.8) \bullet 0}{2.8}$

8. Divide: $\frac{-28}{0}$; what is the reciprocal of this number?

SHOW YOUR WORK

1. Write in exponential form; $y \bullet y \bullet y \bullet y \bullet y$

2. Simplify (state the value): $(-3)^4$

3. Simplify: $3 + 6 \div 3$

4. Simplify $12 \div 3 \bullet 2$

5: Simplify: $3(-10)^2 - 25 \div (2 + 3)^2$

6: Write an equivalent expression without the parenthesis $3x - 2(2x - y + 3)$

7: Evaluate *for* $x = -2$: $24 \div x^3$