Algebra 1 Summer Packet

Name_____

Write the whole number in words.

1) 9,300,695 1) _____

Add.

2) 2) _____

$$\begin{array}{r} 587{,}142 \\ 30{,}645 \\ +\ 5{,}300{,}621 \\ \hline \end{array}$$

Round the whole number to the given place.

3) 49,815,425 to the nearest million 3) _____

Simplify.

4) $12 + 16 \div 4 \cdot 5 - 8$ 4) _____

Write the phrase as a variable expression. Use x to represent "a number."

5) The quotient of a number and 9, decreased by 4 5) _____

Add.

6) $1 + (-5) + 14 + (-2) + 4 + (-7)$ 6) _____

Add or subtract as indicated.

7) $9 - 0 - 5 - (-20) + (-11)$ 7) _____

Find the quotient.

8) $\frac{0}{5}$ 8) _____

Simplify.

9) $\frac{20(-1) - (-4)(-5)}{2[-12 \div (-3 - 3)]}$ 9) _____

Solve the equation.

10) $-30 = y - 24$ 10) _____

Simplify the expression.

11) $15 - |-30|$ 11) _____

12) $\frac{30}{5} - \frac{9^2}{9}$ 12) _____

Simplify the expression by combining like terms.

13) $-4b - 3a + 2c + 3b - 5a$ 13) _____

Simplify the expression.

14) $4(6x + 2) + 5(x + 4)$ 14) _____

Write the fraction in simplest form.

15) $-\frac{51}{57x}$ 15) _____

Divide and simplify.

16) $\frac{3}{8} \div -\frac{5}{6}$ 16) _____

Perform the indicated operations. Write the answer in simplest form.

17) $\frac{6}{5} \div \left(\frac{20}{7} \cdot \frac{6}{50}\right)$ 17) _____

Add or subtract as indicated. Write the answer in simplest form.

18) $\frac{6}{17x} - \frac{15}{17x}$ 18) _____

19) $\frac{7}{15} + \frac{9}{15} - \frac{1}{15} - \frac{2}{15}$ 19) _____

Add or subtract as indicated. Write the answer in simplest form.

20) $\frac{5}{8} - \frac{1}{3}$ 20) _____

Add or subtract as indicated. Write the answer as a mixed number in simplest form.

21) 21) _____

$$\begin{array}{r} 1\frac{1}{6} \\ 2\frac{1}{16} \\ +\ 2\frac{1}{4} \\ \hline \end{array}$$

Solve.

22) $\frac{a}{2} - \frac{1}{2} = -6$ 22) _____

23) $\frac{x}{9} = \frac{x}{10} + \frac{1}{9}$ 23) _____

Simplify the complex fraction.

24) _____

24) $\dfrac{\frac{3x}{7}}{\frac{2x^2}{7}}$

Solve.

25) $\frac{x}{4} - \frac{x}{5} = \frac{5}{4}$ 25) _____