

Summer Packet for Students Entering Algebra I Due: Friday September 1, 2023

Name \_\_\_\_\_

Welcome to Algebra I! This packet contains the topics that you have learned in your previous courses. Please read the directions, complete the problems (with all work shown).

**Simplify. SHOW YOUR WORK!!**

1)  $425 + 275$

2)  $230 - 760$

3)  $7 \bullet 1.6$

4)  $\frac{37.5}{2.5}$

5)  $\frac{1}{6} + \frac{2}{3}$

6)  $\frac{5}{8} - \frac{1}{4}$

7)  $\frac{7}{9} \bullet \frac{3}{14}$

8)  $\frac{6}{5} \div 3$

9) Estimate:  $2001 \div 49$

10) Round 3.9619 to

11) Write 0.625 as a fraction.

a) the nearest tenth \_\_\_\_\_

b) the nearest hundredth \_\_\_\_\_

**Write as a ratio in lowest terms.**

12) 20g to 50g

13) 7cm to 1m

14) 8 in. to 2 ft.

**Simplify.**

- 15)** 5 is what percent of 50?      **16)** 10% of 260 is what number?      **17)** 3 is 12% of what number?

- 16)** Write the decimals in order from least to greatest: 3.08, 3.0, 3.006, 3.0008, 3.7

- 17)** Find the perimeter and area of a 10 in. by 6 in. rectangle.

**Simplify.**

**18)**  $3 - 5$

**19)**  $11 - (-2)$

**20)**  $(-4)(-6)$

**21)**  $-15 \div 3$

**22)**  $3 + 6x - 4$

**23)**  $5x + 1 - 3x$

**Write a variable expression.**

**24)** 8 plus y

**25)** twice n decreased by 9

**26)**  $\frac{1}{3}$  of the sum of x and y

**Solve.**

**27)**  $y + 4 = 20$

**28)**  $4x = 26$

**29)**  $3x + 7 = 25$

**30)**  $2n - 5 = 4n + 9$

**31)**  $\frac{x}{9} = 3$

**32)**  $\frac{2}{3}x = 8$

**33)** Amy's dog is 12 pounds heavier than Liz's dog. Together the dogs weigh 98 pounds. How much does Amy's dog weigh?

**34)** A postal clerk sold some fifteen-cent stamps and some twenty-five cent stamps. Altogether, 10 stamps were sold for a total cost of \$1.70. How many of each type of stamp were sold?