

Name \_\_\_\_\_

## Algebra 1 Honors Summer Assignment

Please do not use a calculator for any of the questions. Write all answers as simplified fractions, when necessary.

Simplify.

1.  $\frac{1 + 2(3^2 - 1)}{4 + 5 \cdot 2}$

2.  $\frac{3 + \frac{1}{2}}{2 + \frac{3}{4}}$

3.  $4(2 - 7)^2 - 6 + 5 \cdot 3$

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. A recipe for 12 cookies calls for  $1\frac{1}{3}$  cups of milk,  $2\frac{1}{2}$  cups of flour, and  $1\frac{3}{4}$  cups of other ingredients. How many total cups of ingredients are in the cookies?

5. A water tank has a maximum capacity of 84 gallons. If the tank is  $\frac{2}{7}$  full, how many gallons of water is in the tank?

4. \_\_\_\_\_

5. \_\_\_\_\_

6. Kerry took  $\frac{2}{3}$  of a pie and put it on her plate. She then ate  $\frac{1}{4}$  of that piece. How much of the pie did Kerry eat?

6. \_\_\_\_\_

7. In her first 18 times at bat, a baseball player walked 8 times. If she continues at the same rate, how many walks will she have after 45 times at bat?

7. \_\_\_\_\_

8. What is 45% of 175?

8. \_\_\_\_\_

9. 10 is what percent of 200?

9. \_\_\_\_\_

10. 77 is 55% of what number?

10. \_\_\_\_\_

Evaluate each expression when  $x=3$ ,  $y=-3$ , and  $z=2$

11.  $\frac{xy}{12}$

11. \_\_\_\_\_

12.  $x^2 - 4y$

12. \_\_\_\_\_

13.  $z - y + 10x$

13. \_\_\_\_\_

Simplify.

14.  $4\frac{1}{8} \div 2\frac{3}{4}$

15.  $7 - 4\frac{2}{3} - 2\frac{1}{4}$

16. Find  $|a - b| + 2c$  if  $a=-1$ ,  $b=-3$ , and  $c = -\frac{3}{8}$

14. \_\_\_\_\_

15. \_\_\_\_\_

16. \_\_\_\_\_

17. Put these numbers in order from least to greatest.

$-\frac{17}{25}$ ,  $-\frac{5}{8}$ ,  $\frac{1}{4}$ ,  $\frac{3}{4}$ ,  $\frac{11}{16}$

18. 36 of 80 marbles are blue. What percent of the marbles are blue?

17. \_\_\_\_\_

18. \_\_\_\_\_

19. Solve.  $-\frac{3}{4}x = 16$

20. Find  $(3a - \frac{1}{3}b - |c|) + a^2$  if  $a=2$ ,  $b=3$ , and  $c=-9$

19. \_\_\_\_\_

20. \_\_\_\_\_

Perform the indicated operations. Show all work. Write your answers in decimal form.

21.  $(-4.29)(.5)$

22.  $(-2.7)(-3)$

23.  $(-.033) \div (-.04)$

21. \_\_\_\_\_

22. \_\_\_\_\_

23. \_\_\_\_\_

24.  $(-16.6) \div (5)$

25. Solve.  $-\frac{2}{3} + x = 1\frac{4}{7}$

24. \_\_\_\_\_

25. \_\_\_\_\_