ALGEBRA I SUMMER ASSIGNMENT

Summer 2022

Name: _____

Directions: Complete all of the problems in this packet. Neatly label and show your work. If you need additional space, attach notebook or graph paper with your work clearly labeled. Do not use a calculator unless the directions state to do so.

This packet will be collected on the first day of class and there will be a test on the material within the first two weeks of school.

Add, subtract, multiply, or divide.

1. -9 + (-15)

2. 6 - 9

3. -12 - (-10)

4. 2(-7)

5. $-30 \div (-6)$

6. $-8 \bullet 2$

7. $\frac{2}{5} + \frac{1}{5}$

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

9. $\frac{5}{3} - \frac{2}{5}$

10. $\frac{7}{4} - \frac{6}{7}$

11. $(\frac{2}{3})(\frac{3}{4})$

12. $(8)(\frac{1}{2})$

13. $(\frac{1}{2})(\frac{5}{7})$

14. $\frac{5}{3} \div \frac{7}{5}$

15. $\frac{3}{4} \div \frac{5}{8}$

Simplify the expression using the order of operations. Show all of your work!

16. $14 \div 7 - 2^2 + (-3) \bullet 2 - 1$

17. $-4 - (3 + 6^2) \div 13 - 1^2 \bullet (-12)$

Simplify each expression as much as using the distributive property, combining like terms, and the order of operations where appropriate. Show all of your work!

18. $7x - 1 + 2x$

19. $3m + 2 - 6m + 8 - 1$

20. $-4(2y - 1) + 3y - 7$

21. $3(d + 3) - (2d - 1) + 11d + 8$

Evaluate each expression for the given value of x. Show all of your work! You may use a calculator if needed.

22. $2x - 6; x = 9$

23. $-7 + 9x; x = 3$

24. $-x - 12; x = 4$

25. $11x + 17; x = -6$

Solve each equation below using inverse operations. Show all of your work.

26. $x + 3 = 7$

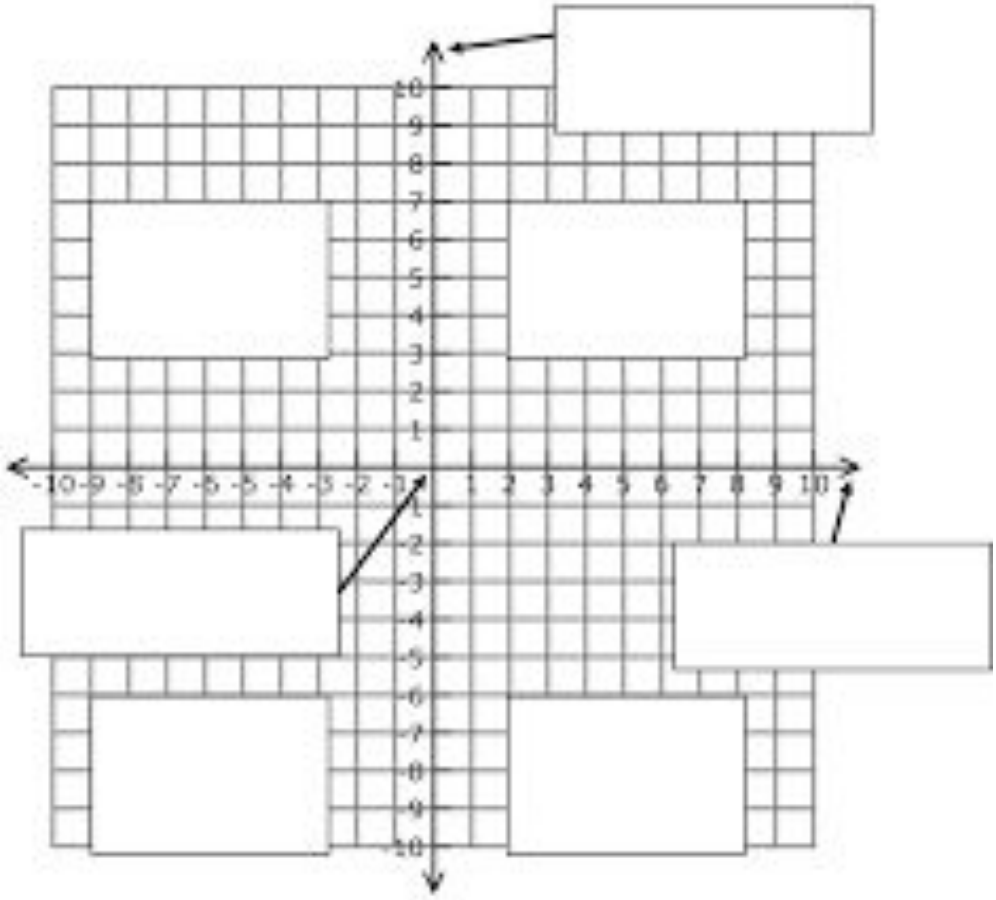
27. $5x = -20$

28. $4x - 6 = 14$

29. $x + \frac{1}{2} = \frac{3}{4}$

Label the parts of the coordinate plane below. Use all of the words in the word bank provided.

30.



Word Bank:

Quadrant 1

Quadrant 2

Quadrant 3

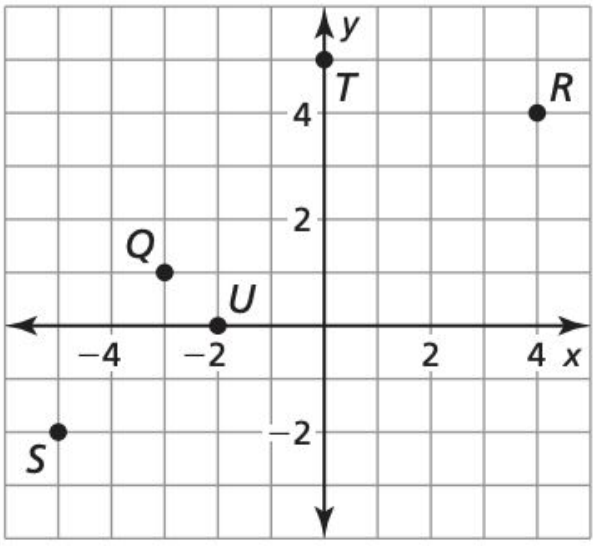
Quadrant 4

X-axis

Y-axis

Origin

Use the graph to answer the questions below.



31. What ordered pair corresponds to point U?

32. What ordered pair corresponds to point S?

33. Plot the point V located at (3, -2).

34. Plot the point W located at (2, 4).

35. Which point is located in Quadrant 2?