

Summer 2020

Directions: Please complete all of the problems in this packet. Neatly label and show your work and indicate your answer in the space provided. 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 within the first few days of school, and you may have a test on the material within the first few weeks of school.

**Skills  
Test**
**Prerequisite Skills Test**
**Add or subtract.**

1.  $-9 + (-15)$

2.  $2 + (-3)$

3.  $6 - 9$

4.  $-6 - 11$

5.  $13 + 8$

6.  $-12 - (-10)$

**Multiply or divide.**

7.  $2(-7)$

8.  $-8 \cdot 2$

9.  $9 \div 3$

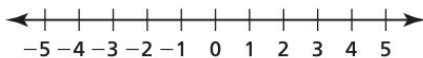
10.  $25 \div (-5)$

11.  $-30 \div (-6)$

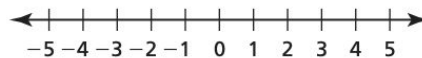
12.  $-1(-7)$

**Graph the number.**

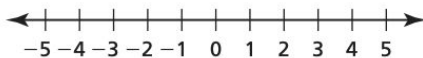
15. 4



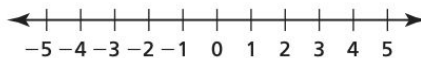
16.  $|-3|$



17.  $-6 + |5|$



18.  $1 - |-3|$


**Complete the statement with  $<$ ,  $>$ , or  $=$ .**

19.  $3$  \_\_\_  $7$

20.  $-1$  \_\_\_  $4$

21.  $-4$  \_\_\_  $-10$

22.  $|-6|$  \_\_\_  $-3$

Evaluate the expression for the given value of  $x$ .

23.  $2x - 6; x = 9$

24.  $-7 + 9x; x = 3$

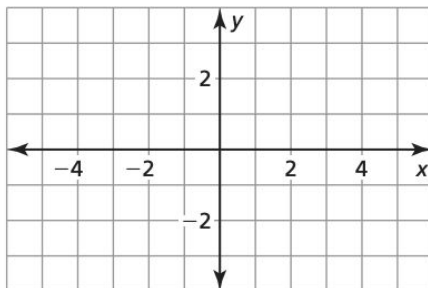
25.  $12x + 13; x = 5$

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

27.  $13 - 7x; x = -10$

28.  $11x + 17; x = -6$

Plot the point in the coordinate plane. Describe the location of the point.



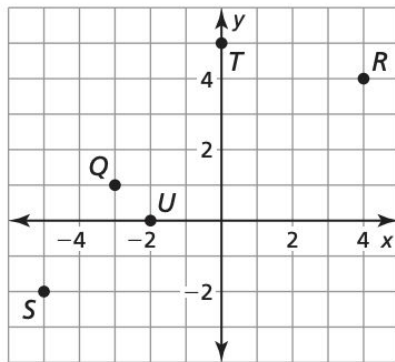
29.  $A(4, 2)$

30.  $B(-1, 3)$

31.  $C(-5, -3)$

32.  $D(3, 0)$

Use the graph to answer the question.



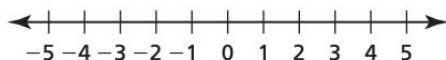
33. Which ordered pair corresponds to point  $U$ ?

34. Which ordered pair corresponds to point  $S$ ?

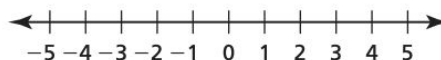
35. Which point is located in Quadrant II?

Solve the inequality. Graph the solution.

41.  $p + 6 > 9$



42.  $3x - 4 < 2$



**Evaluate the expression.**

48.  $14 \div 7 - 2^2 + (-3) \cdot 2 - 1$

49.  $-4 - (3 + 6^2) \div 13 - 1^2 \cdot (-12)$

**Find the square root(s).**

50.  $\sqrt{25}$

51.  $-\sqrt{81}$

52.  $\pm\sqrt{9}$

53.  $-\sqrt{144}$

**Simplify the expression.**

57.  $7x - 1 + 2x$

58.  $3m + 2 - 6m + 8 - 1$

59.  $-4(2y - 1) + 3y - 7$

60.  $3(d + 3) - (2d - 1) + 11d + 8$

**Evaluate the expression when  $x = -3$ .**

61.  $3x^2 - 6$

62.  $2x^2 - 6x + 1$

63.  $-x^2 - 5x - 1$

64.  $x^2 + 3x + 8$

65.  $-2x^2 + 4x + 3$

66.  $-3x^2 - 6 - x$

**Evaluate the expression.**

80.  $3\sqrt{9} - 6$

81.  $\frac{\sqrt{25}}{15} - 7$

82.  $2\left(\frac{\sqrt{16}}{8} + 6\right)$

83.  $-3(9 - \sqrt{100})$

## Fraction Review

Simplify each. Leave your answer as an improper fraction.

1)  $\frac{42}{12}$

2)  $\frac{25}{20}$

3)  $\frac{35}{25}$

4)  $\frac{24}{9}$

5)  $\frac{54}{36}$

6)  $\frac{30}{24}$

Find each product.

29)  $(8)(\frac{1}{2})$

30)  $(-2)(-\frac{9}{7})$

31)  $(\frac{2}{3})(\frac{3}{4})$

32)  $(-\frac{17}{9})(-\frac{3}{5})$

33)  $(2)(\frac{3}{2})$

34)  $(\frac{17}{9})(-\frac{3}{5})$

35)  $(\frac{1}{2})(-\frac{7}{5})$

36)  $(\frac{1}{2})(\frac{5}{7})$

**Find each quotient.**

$$37) -2 \div \frac{7}{4}$$

$$38) \frac{-12}{7} \div \frac{-9}{5}$$

$$39) \frac{-1}{9} \div \frac{-1}{2}$$

$$40) -2 \div \frac{-3}{2}$$

$$41) \frac{-3}{2} \div \frac{13}{7}$$

$$42) \frac{5}{3} \div \frac{7}{5}$$

**Find each sum.**

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

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

**Find each difference.**

$$7) \frac{5}{3} - \frac{2}{5}$$

$$8) \frac{7}{4} - \frac{6}{7}$$

**Evaluate each expression.**

$$11) \left(-\frac{5}{3}\right) + \left(-\frac{3}{2}\right)$$

$$12) \left(-\frac{3}{2}\right) - \frac{6}{5}$$

$$13) \left(-\frac{9}{7}\right) + \left(-\frac{1}{3}\right)$$

$$14) \frac{3}{7} - \left(-\frac{4}{7}\right)$$