



Math Summer Assignment for
Pre-Algebra
Wall Township Math Department
Optional Summer Assignment



- ★ This summer assignment is intended to prepare you for the math course above.
- ★ You will find examples and video links to help you complete the practice.
- ★ It is important to complete this practice *without the use of a calculator*.

Skill 1: Decimal Operations without a Calculator



Helpful Video Link:

→ [Decimal Review | Add, Subtract, Multiply, and Divide Decimals](#)

Practice: Find the sum, difference, product, or quotient.

1)	$91.2 + 89.9$	2)	$982.3 - 8$	3)	$17.2 + 6.08$
4)	$3.652 - 1.41$	5)	$8.6 - 2.43$	6)	$4.73 + 0.947$
7)	7×21.6	8)	54.1×0.69	9)	$48.4 \div 0.4$
10)	$1.26 \div 0.2$	11)	$6644 \div 44$	12)	$0.86 \div 0.004$

Skill 2: Fraction Operations without a Calculator



Helpful Video Link:

→ [YouTube Fraction Review | How to Add, Subtract, Multiply, and Divide Fractions](#)

Practice: Write all answers in simplest form.

1)	$\frac{2}{7} + \frac{6}{10}$	2)	$2\frac{1}{2} + \frac{4}{5}$
3)	$10\frac{2}{3} + 7\frac{1}{7}$	4)	$\frac{2}{7} + \frac{6}{10}$
5)	$\frac{7}{8} \times \frac{1}{2}$	6)	$5\frac{3}{4} \times 1\frac{3}{8}$
7)	$4 \times 6\frac{1}{4}$	8)	$3\frac{3}{4} \div 1\frac{1}{2}$
9)	$\frac{1}{4} \div \frac{1}{12}$	10)	$\frac{1}{4} \div 10$

Skill 3: Order of Operations



Helpful Video Link:

→ [Order of Operations - Made Easy!](#)

Practice: Use the Order of Operations to simplify each numerical expression

1)	$(4 + 9 + 16 \div 4) - 8 - 3 \times 5$	2)	$5 + [10 - (4 + 3)] + 8$
3)	$(12 \div 6) + [(12 + 2) \times 3^2]$	4)	$10^2 + [(12 \times \frac{1}{2}) \div 2] \times 6$
5)	$16 \div [(3.2 \times 3) + 1.8]$	6)	$36.8 \div [11.5 - (2.5 \times 3)]$

Skill 4: Plotting Points



Helpful Video Link:

→ [Plotting Points on a Coordinate Plane | Quadrant 1](#)

Practice:

Plot the following points on the coordinate plane, and label the point with the appropriate letter.

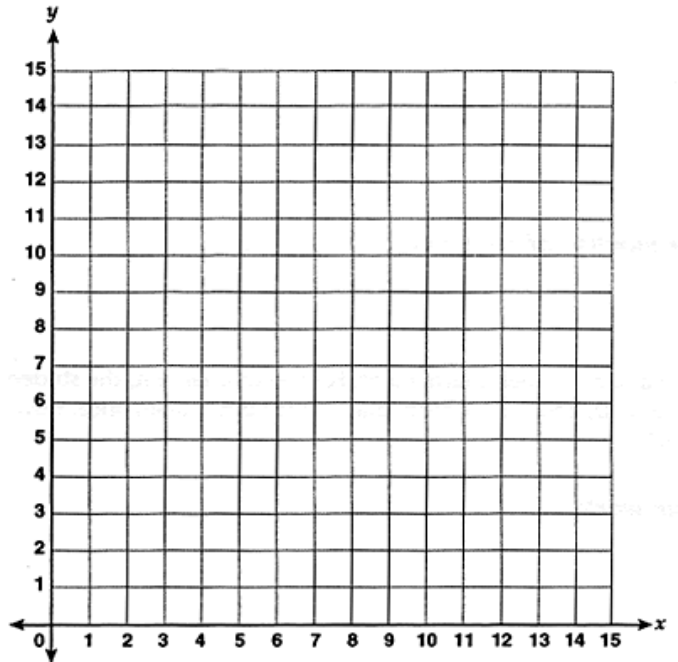
Point A (5,6)

Point B (12,0)

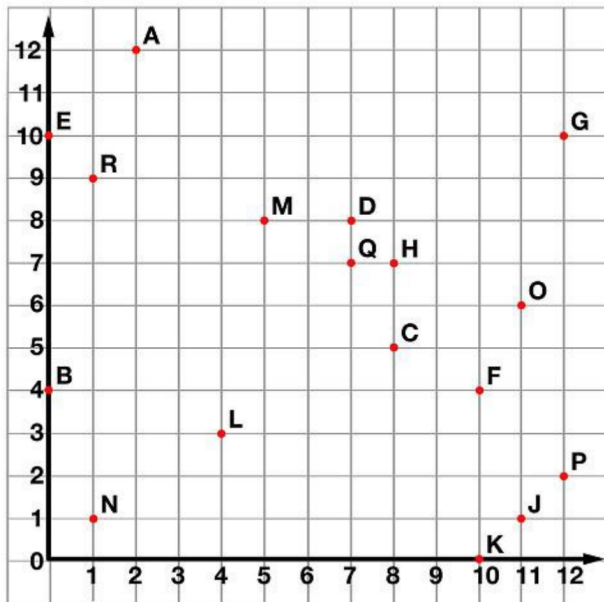
Point C (0,6)

Point D (8.5, 3)

Point E (1.5, 11.5)



Use the coordinate plane below to identify the ordered pair for the point.



Point M _____

Point B _____

Point A _____

Point K _____

Point G _____

Point L _____

Point F _____

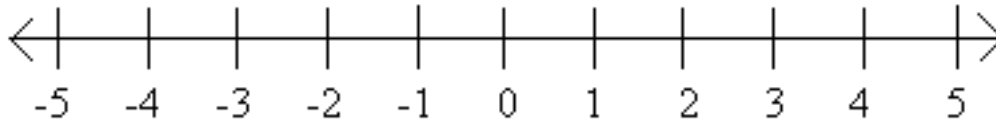
Skill 5: Plotting Points on a Number Line



Helpful Video Link:

→ [Plotting basic fractions on the number line | Fractions | Pre-Algebra | Khan Academy](#)

Practice: Plot the following points on the number line below. Label each point with the appropriate letter



a) 5

b) $-3 \frac{1}{2}$

c) -1

d) $\frac{4}{3}$

e) 2.25

f) -0.75

g) $4 \frac{2}{3}$

Skill 6: Determine the GCF and LCM of two numbers



Helpful Video Link:

- [Greatest Common Factor | How to Find the Greatest Common Factor \(GCF\)](#)
- [Least Common Multiples | LCM | 5th Grade Math](#)

Practice:

Find the GCF (greatest common factor) or LCM (least common multiple) of the numbers below

1) GCF: 12 and 100

2) GCF: 6, 21, and 84

3) LCM: 13 and 9

4) LCM: 36 and 8

Answer the following questions. (Hint: Use the GCF or LCM)

5) Sara has 16 red flowers and 24 yellow flowers. She wants to make bouquets with the same number of each color flower in each bouquet. What is the greatest number of bouquets she can make?

6) Two neon signs are turned on at the same time. Both signs blink as they are turned on. One sign blinks every 9 seconds. The other sign blinks every 15 seconds. In how many seconds will they blink together again?

7) Lisa is making activity baskets to donate to charity. She has 12 coloring books, 28 markers, and 36 crayons. What is the greatest number of baskets she can make if each type of toy is equally distributed among the baskets? How many of each supply will go into the baskets?

Skill 7: Finding the perimeter and area of polygons



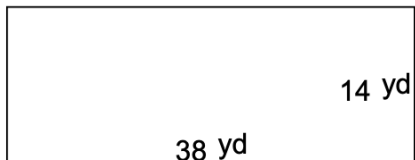
Helpful Video Link:

→ [Area and Perimeter of Irregular Shapes](#)

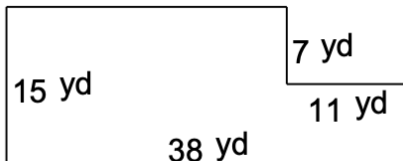
Practice:

Find the perimeter of the following shapes.

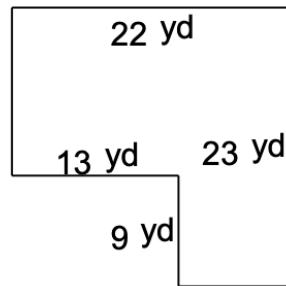
1)



2)

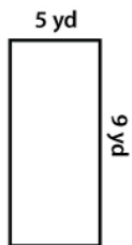


3)

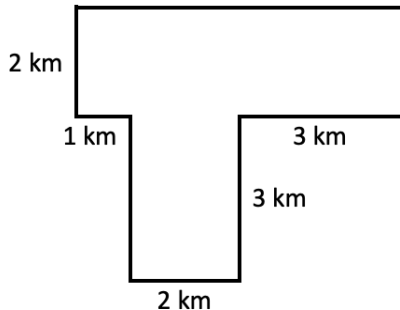


Find the area of the following shapes.

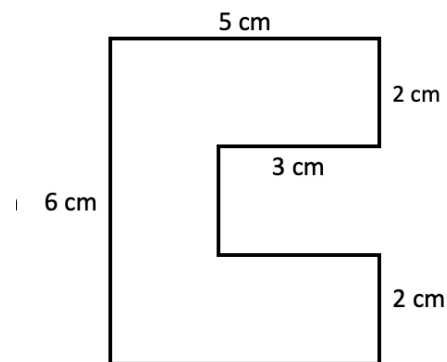
4)



5)



6)



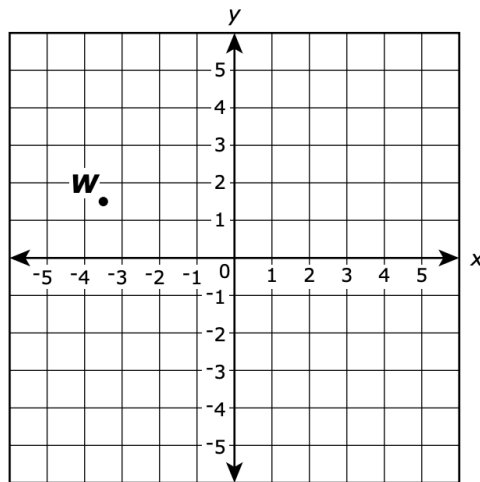
Standardized Test Practice

1. These five rational numbers are plotted on a horizontal number line.

$$-\frac{2}{3}, \frac{7}{8}, -\frac{4}{5}, \frac{7}{10}, -\frac{4}{3}$$

Which statement about the locations on the number line of the rational numbers is true?

- A. $-\frac{2}{3}$ is farthest to the left, and $\frac{7}{8}$ is farthest to the right.
- B. $-\frac{4}{3}$ is farthest to the left, and $\frac{7}{8}$ is farthest to the right.
- C. $-\frac{2}{3}$ is farthest to the left, and $\frac{7}{10}$ is farthest to the right.
- D. $-\frac{4}{3}$ is farthest to the left, and $\frac{7}{10}$ is farthest to the right.
2. The area of a rectangular patio is $5\frac{5}{8}$ square yards, and its length is $1\frac{1}{2}$ yards. What is the patio's width, in yards?
- A. $3\frac{3}{4}$
- B. $4\frac{1}{8}$
- C. $7\frac{1}{8}$
- D. $8\frac{7}{16}$
3. This coordinate plane shows the location of point W .



What is the value of the x-coordinate of point W ? Enter your answer as a decimal to the nearest 0.5.

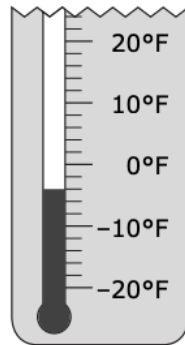
Answer:

4. Enter your answer in the box.

$$33.8 \div 32.5 =$$

Answer:

5. The picture shows part of a thermometer measuring temperature in degrees Fahrenheit.



What is the temperature, in degrees Fahrenheit, shown on the thermometer to the nearest integer?