

MATH 4: Homework 10

Due December 9, before the start of the class

Homework must be submitted on time—at least 15 minutes before the start of the class.

Homework will not be graded after the solutions are posted on Google Classroom.

Write the answers on separate sheets of paper, not between the lines.

1. Fill in the missing number to have the right equalities.

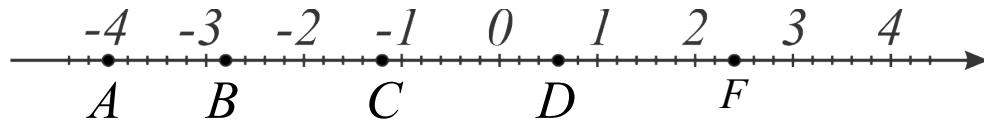
Example : a. $\frac{3}{7} \cdot \frac{7}{3} = 1$

a. $\frac{3}{7} \cdot \underline{\quad} = 1$; b. $\frac{2}{5} \cdot \underline{\quad} = 1$; c. $1 : \frac{2}{5} = \underline{\quad}$ d. $\underline{\quad} \cdot \frac{12}{11} = 1$

e. $2\frac{1}{2} \cdot \underline{\quad} = 1$; f. $\underline{\quad} \cdot 1\frac{1}{3} = 1$; g. $1 : \underline{\quad} = \frac{3}{10}$ h. $1 : \frac{12}{11} = \underline{\quad}$

2. Find the coordinates of points:

Example: A(-4)



3. In your notebook draw a line (use ruler!), mark 0, 1, 2, 3, -1, 2-, 3. Mark points with coordinates $A(-1)$, $B\left(-1\frac{1}{2}\right)$, $C\left(2\frac{1}{3}\right)$, $D\left(1\frac{1}{2}\right)$.

4. Continue numbers on both sides of the sequence by three numbers:

Example: a. $-40, -39, -38, -37, -36, -35, -34, -33, -32$

a. $\dots, -37, -36, -35, \dots$; b. $\dots, 2, 3, 4, 5, \dots$; c. $\dots, -98, -97, -96, \dots$;

5. Evaluate: **Example:** a. $7 + (-2) = 5$

a. $(-10) + (+11)$; b. $(-7) + (-6)$; c. $(-4) + (+2)$;
d. $(-12) + (+3)$; e. $(-15) + (+18)$; f. $(-11) + (-20)$;
g. $(+20) + (-21)$; h. $(-100) + (-150)$; i. $(-3) + (+4)$;

6. Draw a number line. Write and then place on this line:
- all positive integer numbers that are less than 3
 - all negative integer numbers greater than -5
 - all integer numbers larger than -2 and smaller than $4\frac{1}{2}$

7. What number should be placed instead of “?”



8. There are singers and dancers in our class. $\frac{1}{5}$ of all singers also dance and $\frac{1}{4}$ of all dancers also sing. Are there more singers or dancers in our class?