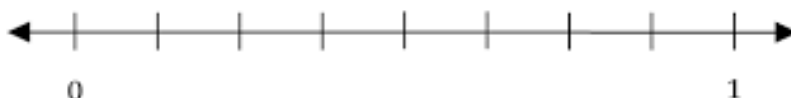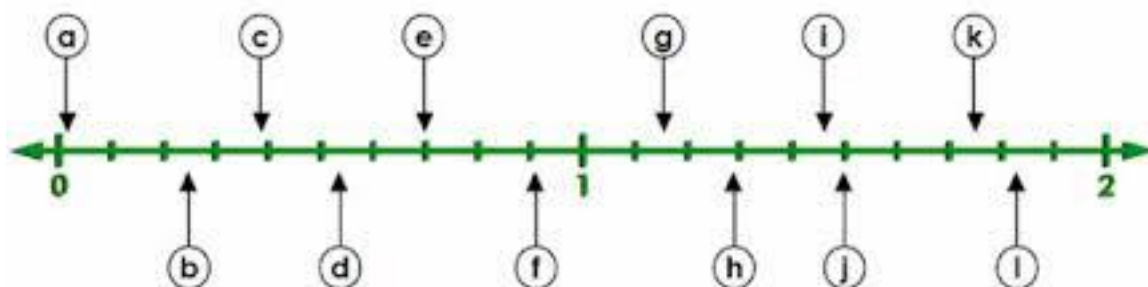# Math 3. Homework 25

1.

Write the letter that represents where each fraction would go on the number line:

$$\frac{1}{2}\ ;\quad \frac{1}{4}\ ;\quad \frac{4}{4}\ ;$$

$$\frac{3}{8}\ ;\quad \frac{5}{8}\ ;\quad \frac{8}{8}\ .$$

0   1

2.

Write down the fractions corresponding to each letter:

a –   b –   c –   d –   e –   f –

g –   h –   i –   j –   k –   l –

3.

Long division:

486 ÷ 27 =   2,916 ÷ 27 =   2,403 ÷ 27 =

4. Find all the pairs that total 1 and connect those fractions by line.

$\dfrac{1}{2}$ $\dfrac{3}{4}$ $\dfrac{4}{8}$ $\dfrac{10}{12}$

$\dfrac{1}{3}$ $\dfrac{6}{9}$ $\dfrac{2}{8}$ $\dfrac{4}{10}$

$\dfrac{3}{5}$ $\dfrac{4}{5}$ $\dfrac{1}{6}$ $\dfrac{2}{10}$

5. Insert the missing fraction:

a) _____ $+ \dfrac{1}{3} = 1\dfrac{2}{3}$ b) $\dfrac{2}{3} +$ ____ $= 2\dfrac{1}{3}$ c) $\dfrac{5}{8} +$ ____ $= 3\dfrac{3}{8}$

d) _____ $+ \dfrac{9}{10} = 8\dfrac{9}{10}$ e) ____ $- \dfrac{2}{8} = 2\dfrac{3}{8}$ f) ____ $- \dfrac{4}{5} = 6\dfrac{1}{5}$

g) $3\dfrac{11}{12} -$ _____ $= \dfrac{5}{12}$ h) $5\dfrac{4}{7} -$ ____ $= \dfrac{2}{7}$

6. Find:

a) $\dfrac{1}{3}$ of 60 $\dfrac{1}{3}$ of 90 $\dfrac{1}{3}$ of 1,200
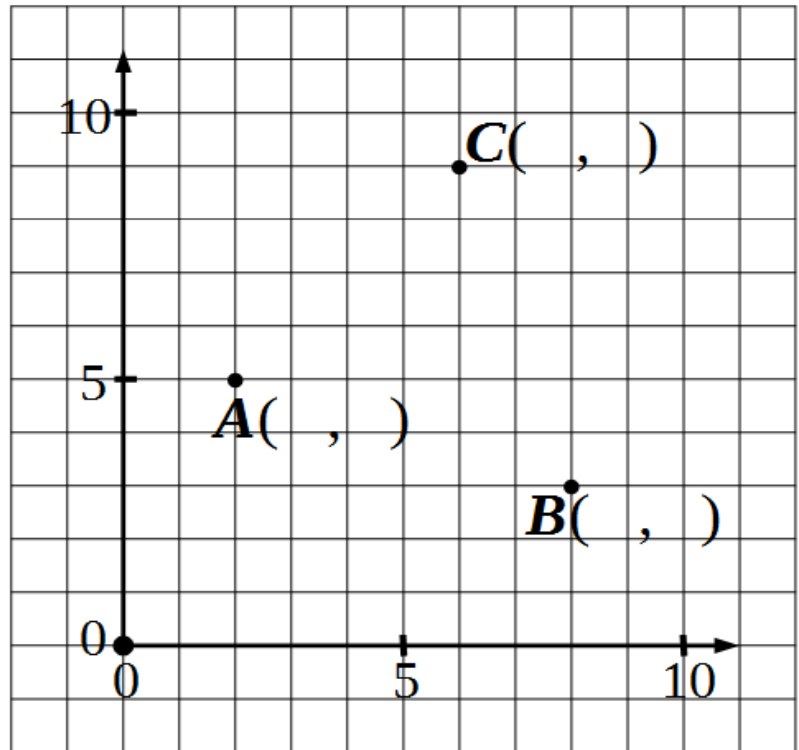
b) $\dfrac{1}{7}$ of 63 $\dfrac{2}{7}$ of 63 $\dfrac{3}{7}$ of 63

2

7. Find coordinates of the points A, B and C

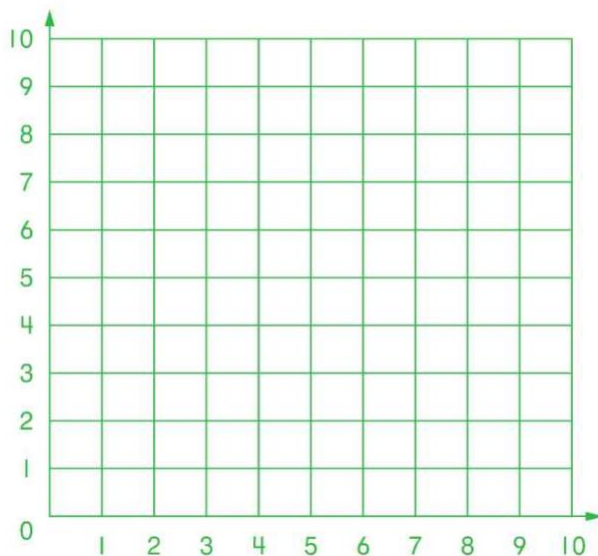*A* (,)

B (,)

C (,)

Plot points

D (3, 2)

E (11, 5)

F (4, 12)

G (7, 5)

8. Mark the Axis X and Axis Y. Remember X is horizontal, Y is vertical.

On the coordinate plane mark the points with the following coordinates:

A (1, 2)   B (2, 2)   C (3, 4)   D (6, 7)

3

9. Compare without calculation , using <, > or =.

$(14 + 21) + (21 + 14)$ … $(14 + 21) \times 3$

$37 + 24 + 24 + 37$ … $(37 + 24) \times 2$

$(34 + 19) - (37 - 37)$ … 0

$(28 + 22) \div (150 - 100)$ … 0

$(a + b) - (a + b)$ … 1

$2(a + b + c)$ … $2a + b + c$

10. A hotel has 5 types of rooms depending on the number of beds. The rooms shown on the map are labeled accordingly. Figure out in which rooms Victoria and Julia are staying? Make a copy of the map and use pencil to find the options.

You know that:

- Neither of their rooms is located next the number 3: not to the left, not to the right, not above, not below.

- Both of their rooms are located either to the right or to the left of both the numbers 4 and 1.

- Both of their rooms are located nearby (to the right or left or above or below) of both the numbers 1 and 5.

- Victoria's room is to the left of Julia's room.

3	2	1	1	4	3	3	5
5	3	4	1	4	3	3	4
1	2	5	4	1	4	1	3
3	2	1	4	1	3	5	4
5	2	2	1	4	3	3	2
4	5	1	4	2	4	5	5
4	2	1	2	4	3	1	3
4	4	1	5	1	3	1	3
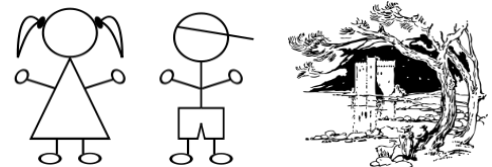
11. OPEN parenthesis, regroup and SIMPLIFY.
Example: a − (2b − c) − (3d − c − b − 5a) = a − 2b + c − 3d + c + b + 5a =
= a + 5a − 2b + b + c + c − 3d = 6a − b + 2c − 3d

$4(5a + 4b) - 2(a - 3c + 5b - 6b) =$ _____

_____

$3x - (y + z - x - 3z + 4y) =$ _____

_____