1. Calculate: a).
$$\frac{1}{1+\frac{1}{2}}$$

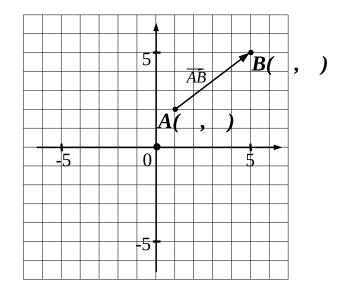
b).
$$\frac{1}{1+\frac{1}{1+\frac{1}{2}}}$$

c).
$$\frac{1}{1+\frac{1}{1+\frac{1}{2}}}$$

- **2.** Properties of vectors:
- *a*). Find coordinates of the points *A* and *B*.
- **b).** What are the coordinates of vector \overline{AB} ?

$$\overrightarrow{AB} = ($$
 , $)$

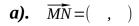
- *c)***.** What is the relationship between coordinates A, and B, and coordinates of \overline{AB} ?
- *d*). Find coordinates of vector $\overrightarrow{BA} = ($,)



For any two points X and Y: $\overline{XY} + \overline{YX} =$

3. Plot points M(3, 4), N(-2, 4), L(1, -3).

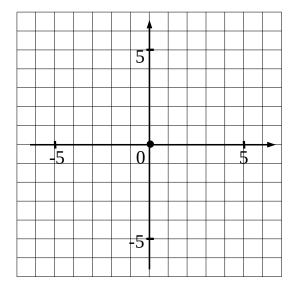
Calculate and plot vectors ...



b).
$$\overrightarrow{LN} = ($$
 , $)$

c).
$$\overline{NL} = ($$
 , $)$

d).
$$\overrightarrow{ML} = ($$
 , $)$



- **4.** *a*). A snail crawls $2\frac{1}{2}$ m/h. How long will it take the snail to crawl 25 cm?
- **b).** How long does it take a car moving 50mi/h to travel 120 mi?

5. Solve equations:
$$\frac{1}{1 + \frac{1}{x}} = 2$$

$$\frac{1}{1+\frac{2}{x}}=\frac{1}{3}$$

$$\frac{1}{1+\frac{2}{x}} = 3$$