

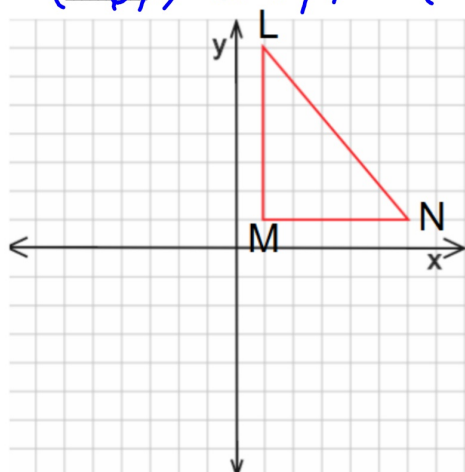
Graph and write the coordinates of the triangle below with each transformation.

1. What are the coordinates of triangle LMN after a reflection across the x-axis?

L' (1, -7) M' (1, -1) N' (6, -1) $(x, y) \rightarrow (x, -y)$

2. What are the coordinates of triangle LMN after a reflection across the y-axis?

L' (-1, 7) M' (-1, 1) N' (-6, 1) $(x, y) \rightarrow (-x, y)$



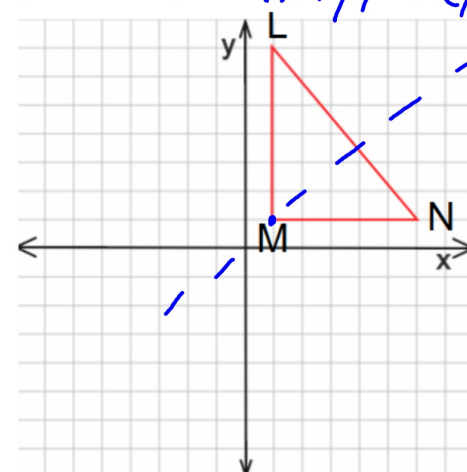
L (1, 7)
M (1, 1)
N (6, 1)

3. What are the coordinates of triangle LMN after a 180° rotation?

L' (-1, -7) M' (-1, -1) N' (-6, -1) $(x, y) \rightarrow (-x, -y)$

4. What are the coordinates of triangle LMN after a reflection across the line $y = x$?

L' (7, 1) M' (1, 1) N' (1, 6) $(x, y) \rightarrow (y, x)$



L' (7, 1)
M' (1, 1)
N' (1, 6)

5.

$$9ax + 9b - 6 = 21$$

Based on the equation above, what is the value of $ax + b$?

- A) 3
- B) 6
- C) 8
- D) 12

$$\begin{aligned} &+6 + 6 \\ &9ax + 9b = 27 \\ &\quad \uparrow \\ &ax + b = 3 \end{aligned}$$

6. Lani spent 15% of her 8-hour workday in meetings. How many minutes of her workday did she spend in meetings?

- A) 1.2
- B) 15
- C) 48
- D) 72

$$\begin{aligned} &8 \times 60 = 480 \text{ mins} \\ &\quad \times .15 \\ &\hline &72 \text{ mins} \end{aligned}$$

7. In the equation $(ax + 3)^2 = 36$, a is a constant. If $x = -3$ is one solution to the equation, what is a possible value of a ?

- A) -11
B) -5
☒ C) -1
D) 0

$$\begin{aligned}(-3a + 3)^2 &= 36 \\-3a + 3 &= \pm 6 \\-3a &= 3, -9 \\ \hline -3 & \quad a = -1, 3\end{aligned}$$