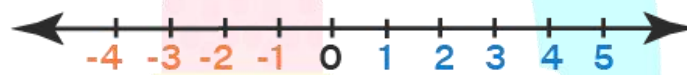## U4-L2,3-Exploring and solving inequalities

1. Name 3 solutions of each inequality. Then graph the inequality on a number line in the set of integers:
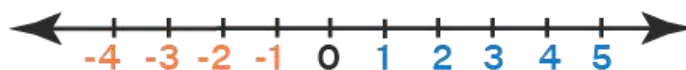
a. a > -4

2. Name 3 solutions of each inequality in the set of rational number.

a. x ≤ -6

3. Represent on the number line the solution of the following inequalities in the set of the integers:

a. x ≤ 2

4. Write the suitable inequality that represented by the following number line in set of integers:

5. Complete the following:

a. The inequality "n more than or equal 3" in mathematical form is ....

b. Aml needs 300 L.E. to buy pants. If she does not have enough money, then the three possible amounts of money Aml

has ....

6. Sale Sign. The sign shows the sale prices of some clothing on a sale rack. Use the sign to determine any prices you might expect to pay for an item from this rack. Record all prices that apply.

a. 140.99 L.E.   b. 180.99 L.E.

c. 150.49 L.E.   d. 290.99 L.E.

e. 120.99 L.E.   f. 150.99 L.E.

SALE
Starting at
150.99
L.E.

Sale Prices

7. The hot air balloon at the right was 7.62m above the ground before it began to lose altitude. Use t < 7.62 to name three possible altitudes of the balloon's descent.

8. Youssef read at least 4 books.

Use b ≥ 4 to find three possible numbers of books that Youssef read.

9. All of the shoes in M & S shoe store cost 200 L.E. or more.

Write an inequality that represents the scenario and find three possible prices of shoes.

10. Record each true statement about the graphs of x > – 2 and x 2–2 on the number line.

a. 2 belong to the solution set of each of them.

b. 2 belong to the solution set of only one of them.
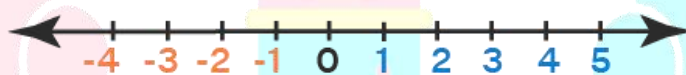
c. The inequality x > – 2 includes all values to the left of – 2 on the number line.

d. The inequality x > – 2 includes all values to the right of – 2 on the number line.

e. They have no points in common.

11. Make a conjecture How will the graphs for each pair of algebraic statements be similar? How will the graphs be different ?

a. x = -2 and x > - 2

Choose the correct answer:

1. Which of the following doesn't represent an inequality?

a. x > -1   b. x = -1

c. x ≤ -1   d. x < -1

2. All of the following are solutions of the inequality m<-3 except

a.-5   b. -4   c. -3   d.-6

3. Which of the following is NOT a solution of y > 3.5?

a. 1.5   b. 4   c. 5.5   d. 6

4. Ali has 2 pets, Adam has more pets than Ali, then Adam may has ....pet[s].

a. 2   b. 1   c. 3   d. 0

5. The inequality that represents the counting numbers is...........

a. X≥1   b. X<1   c. x≥0   d. n≤0

6. If the number a lies to right of the number b, then a .... b

a. <   b. =   c. >   d. either

7. Which of the following quantity is allowed for a passenger, if the maximum weight allows for a passenger is 32 kg?

a. 30 kg   b. 38 kg   c. 35 kg   d. 40 kg