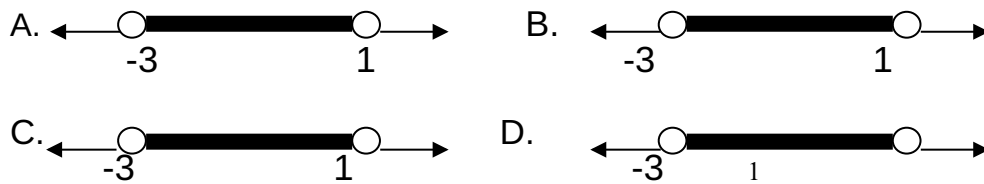


BA SANGAM COLLEGE  
YEAR 9  
MATHEMATICS  
WORKSHEET 1

1. Tina's height is 112cm, to the nearest centimeter. If the measurement is given as  $l$ , then:

- A.  $111.5\text{cm} \leq l < 112.5\text{cm}$                       B.  $111.5\text{cm} < l < 112.5\text{cm}$   
C.  $111.5\text{cm} \leq l \leq 112.5\text{cm}$                       D.  $111.5\text{cm} < l \leq 112.5\text{cm}$

2. Which of the following graphs given below represents the inequality:  $\{X: -3 < x \leq 1, x \in \mathbb{R}\}$ ?

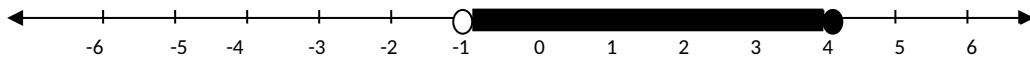


3. Which pair of points will lie on a horizontal line?

- A.  $\{(3, 3), (4, 3)\}$                       B.  $\{(3, 2), (2, 3)\}$   
C.  $\{(2, 4), (2, 5)\}$                       D.  $\{(-3, 3), (3, -3)\}$

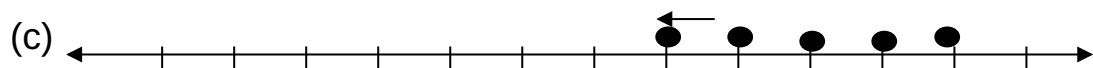
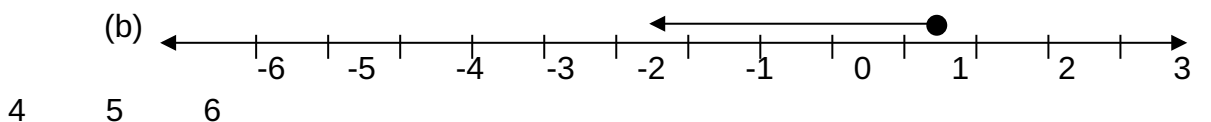
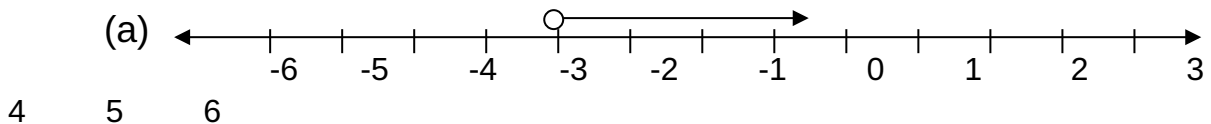
4. Solve  $-3x + 2 > 5, x \in \mathbb{R}$ , and show the solution on a number line.

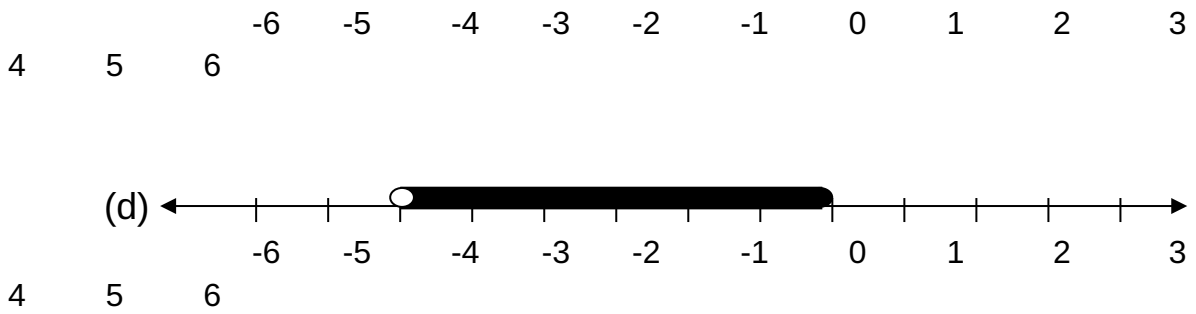
5. Which of the following is true about the set that is shown by the diagram given below?



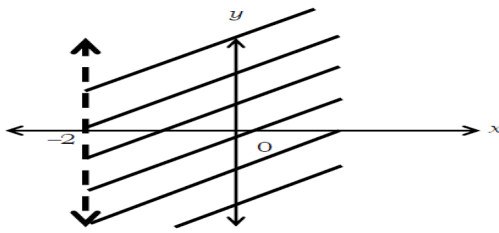
- A.  $\{x : -1 > x \geq 4, x \in \mathbb{R}\}$   
B.  $\{x : -1 < x \leq 4, x \in \mathbb{R}\}$   
C.  $\{x : -1 \leq x < 4, x \in \mathbb{R}\}$   
D.  $\{x : -1 < x \leq 4, x \in \mathbb{R}\}$

6. Describe the following sets in set builder notation.



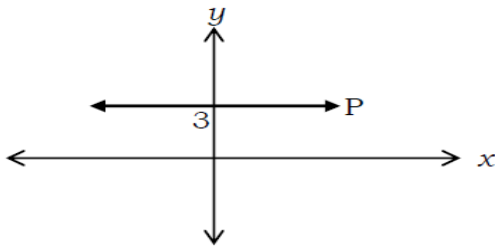


7. Which in equation is represented by the graph shown below?



- A.  $x \geq -2$       B.  $x < 2$   
 C.  $x \leq 2$       D.  $x > 2$

8. What is the equation of the horizontal line P drawn below?

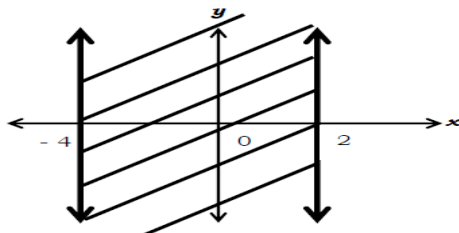


9. Which of the following equation represents a line which is parallel to the y axis?

- A.  $y > 4$       B.  $y = 4$       C.  $x > 4$       D.  $x = 4$

10. draw the graph of the inequality  
 $\{(x, y): -2 < y \leq 3\}$

11. Which **in-equation** is represented by the graph shown below?



A.  $-4 \leq x < 2$

B.  $-4 < x \leq 2$

C.  $-4 \leq x \leq 2$

D.  $-4 < x < 2$

12 Which of the following graph passes through the **origin**?

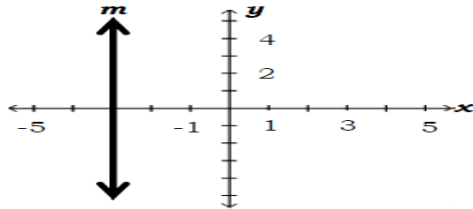
A.  $y = -2$

B.  $y = 0$

C.  $x = 1$

D.  $x = 2$

13. The equation of line **m** shown below is



A.  $y = -3$

B.  $x = -3$

C.  $y = 3$

D.  $x = 3$

14. List all the integers which satisfy the in-equation  $-2 \leq x < 2$

15. The line parallel to the x-axis and passing through the point (1, 2) has the equation

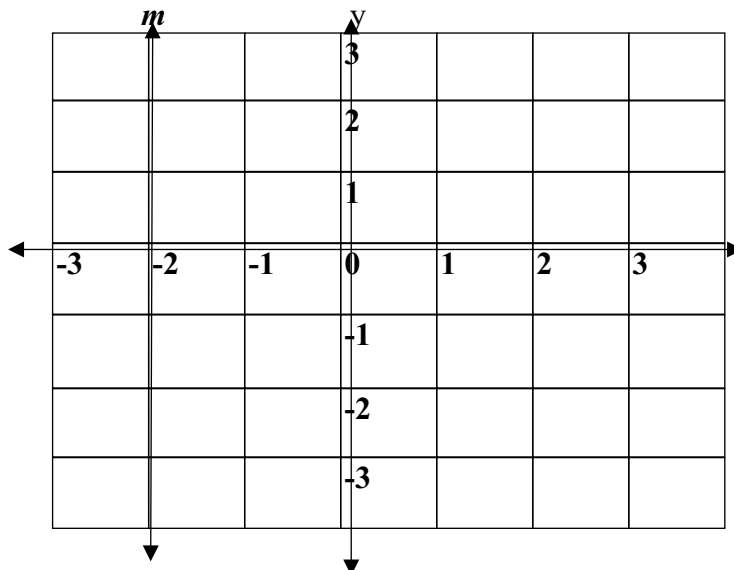
A.  $x = 1$

C.  $y = 1$

B.  $x = 2$

D.  $y = 2$

16. Consider the graph given below.



a) Is line **m** a horizontal or a vertical line?

b) State the equation of line **m** drawn above.