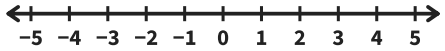
Solving Inequalities and Number Lines

1

Show $x > -2$ on the number line.

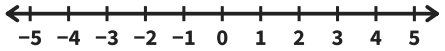


circle on −2: open

arrow: to the right

2

Show $x \leq 3$ on the number line.

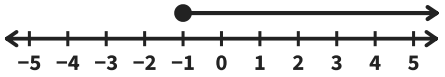


circle on 3: filled

arrow:

3

Write down the inequality shown on the number line.



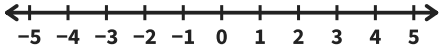
circle:

arrow:

Answer

4

Show $-3 \leq x < 2$ on the number line.
List the integers that fit.

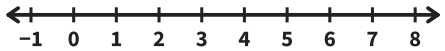


ends:

Integers

5

Solve $4x + 3 > 19$. Show your answer on the number line.



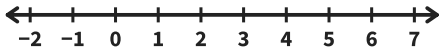
take 3:

divide by 4:

Answer

6 *Notice the change!*

Solve $9 - 2x \geq 3$. Show your answer on the number line.



take 9:

÷ (−2):

Answer

7

Ella solves $12 - 3x < 6$ and writes $x < 2$. Explain her mistake. Then write the right answer.

Answer

8

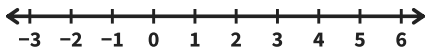
A taxi fare is £3, plus £2 for every mile. Ravi has £15. What is the greatest whole number of miles he can travel?

Answer

Solving Inequalities and Number Lines *further practice*

9

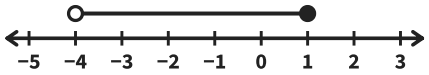
Solve $6x - 5 \leq 13$. Show your answer on the number line.



Answer _____

10

Write down the inequality shown on the number line.



Answer _____

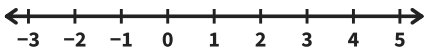
11

Solve $2(x - 4) < 6$.

Answer _____

12

Solve $10 - 4x > 2$. Show your answer on the number line.



Answer _____

13

Solve $\frac{x}{3} + 2 \geq 5$.

Answer _____

14

Find the smallest integer that fits

$7 - 2x < 1$.

Answer _____

15

A van can carry up to 950 kg.
The driver weighs 75 kg and each crate weighs 40 kg. What is the greatest number of crates the van can carry?

Answer _____

16

Ali lists the integers that fit $-3 < x < 3$ as
−3, −2, −1, 1, 2, 3.
Explain his two mistakes.

Answer _____