

Solving Inequalities Using Addition and Subtraction Bell Work

Solve each inequality.

1. $x - 5 \geq 1$

2. $a + 7 \leq 6$

3. $y - 4 > 10$

4. $x + 7 \geq -10$

5. $8 + a < 9$

6. $y + 4 < 2$

7. $9 \leq x + 4$

8. $a - 7 \geq 5$

9. $y - 2.5 > 3.1$

10. $4x \geq 3x + 1$

11. $8a \geq 7a + 7$

12. $2.1y + 3 > 3.1y$

Write and solve an inequality.

13. A number x is decreased by 8 is less than 14.

14. A number x plus 7 is greater than 2.

Write each inequality.

15. The world's smallest fish is the paedocypris progenetica which measures just 7.9 mm. Write an inequality that describes the length of any fish.

Solving Inequalities Using Addition and Subtraction Bell Work**ANSWER**

Solve each inequality.

1. $x - 5 \geq 1$

$$x - 5 + 5 \geq 1 + 5$$

$$x \geq 6$$

2. $a + 7 \leq 6$

$$a + 7 - 7 \leq 6 - 7$$

$$a \leq -1$$

3. $y - 4 > 10$

$$y - 4 + 4 > 10 + 4$$

$$y > 14$$

4. $x + 7 \geq -10$

$$x + 7 - 7 \geq -10 - 7$$

$$x \geq -17$$

5. $8 + a < 9$

$$8 - 8 + a < 9 - 8$$

$$a < 1$$

6. $y + 4 < 2$

$$y + 4 - 4 < 2 - 4$$

$$y < -2$$

7. $9 \leq x + 4$

$$9 - 4 \leq x + 4 - 4$$

$$5 \leq x$$

8. $a - 7 \geq 5$

$$a - 7 + 7 \geq 5 + 7$$

$$a \geq 12$$

9. $y - 2.5 > 3.1$

$$y - 2.5 + 2.5 > 3.1 + 2.5$$

$$y > 5.6$$

10. $4x \geq 3x + 1$

$$4x - 3x \geq 3x - 3x + 1$$

$$x \geq 1$$

11. $8a \geq 7a + 7$

$$8a - 7a \geq 7a - 7a + 7$$

$$a \geq 7$$

12. $2.1y + 3 > 3.1y$

$$2.1y - 2.1y + 3 > 3.1y - 2.1y$$

$$3 > y$$

Write and solve an inequality.

13. A number
- x
- is decreased by 8 is less than 14.

$x - 8 < 14$

$x + 8 < 14 + 8$

$x < 22$

14. A number
- x
- plus 7 is greater than 2.

$x + 7 > 2$

$x + 7 - 7 > 2 - 7$

$x > -5$

Write each inequality.

15. The world's smallest fish is the paedocypris progenetica which measures just 7.9 mm. Write an inequality that describes the length of any fish.

$y > 7.9$