

SIMPLE LINEAR INEQUALITIES

Solve each inequality and show the solution on a number line.

5 $3x > 2x + 12$

6 $3(x + 1) \geq 9$

7 $7x < 3(2x + 1)$

8 $-3x + 2 < 29$

SIMPLE LINEAR INEQUALITIES

Solve each inequality

$$17 \quad \frac{3x}{5} - \frac{2x}{3} > -2$$

$$18 \quad \frac{7x}{3} < 3 + \frac{4x}{3}$$

$$19 \quad \frac{x-5}{2} > \frac{5x-3}{6}$$

$$20 \quad \frac{5x-3}{2} < x+2$$

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24 Solve simultaneously $x - 2 > -2$ and $x - 3 \leq 0$. Indicate whether each answer is correct or incorrect.

(a) $0 \leq x \leq 3$

(b) $0 < x \leq 3$

(c) $0 \leq x \leq 3$

(d) $x > 0$ or $x \leq 3$

26 If a certain number is divided by 2, the result is greater than 4 but less than 8. What values can this number take?

27 The sum of two consecutive positive integers is no more than 35. What are the possible values of these integers?

SIMPLE LINEAR INEQUALITIES

28 A committee consists of 3 more women than men. The total number of committee members is at least 7 but not more than 15. How many women could be on the committee?

30 The base length of an isosceles triangle is an integer (in cm) and is 4 cm less than the sum of the two equal sides. The perimeter is an integer (in cm) less than 80 cm. What are the possible base lengths?