

Questions

Solve the inequality. Write the solution using interval notation, set notation, and graph it on a number line.

1. $3x - 6 > 9$.

2. $7 - 5x \leq -3$.

3. $-2 \leq 7 - \frac{x}{2} < \frac{5}{3}$.

4. $-\frac{1}{2}(4 - x) > 1$ and $\frac{1}{3}(2x - 20) \leq 1$.

5. $|x - 1| \geq 1$.

6. $|4x - 3| < 5$.

7. A spherical bearing is to have a circumference of 7.2cm with an error of no more than 0.1cm. Use an absolute value inequality to find the acceptable range of values for the diameter of the bearing.