

Inequalities - EXT. 1

EXERCISE 19

Find the set of values of x for which:

1 $x^2 - 5x + 4 > 0$

2 $9 - x^2 > 0$

3 $15 + x - 2x^2 \geq 0$

4 $x^2 - 5x - 14 \leq 0$

5 $4x^2 - 9 < 0$

6 $12 - x - x^2 > 0$

7 $\frac{x-2}{x-3} > 2$

8 $\frac{x+6}{3x-1} < 2$

9 $\frac{2}{1-x} < \frac{1}{x+3}$

10 $(4x-5)(2x-3) > 4x$

11 $x - \frac{1}{x} < 1$

12 $2x - 4 > \frac{1}{x}$

Inequalities (ANSWERS)

EXERCISE 19

1 $(-\infty, 1) \cup (4, \infty)$

2 $(-3, 3)$

3 $(-\frac{5}{2}, 3)$

4 $(-2, 7)$

5 $(-\frac{3}{2}, \frac{3}{2})$

6 $(-4, 3)$

7 $(3, 4)$

8 $(-\infty, \frac{1}{3}) \cup (1\frac{3}{5}, \infty)$

9 $(-3, -\frac{5}{3}) \cup (1, \infty)$

10 $(-\infty, \frac{3}{4}) \cup (2\frac{1}{2}, \infty)$

11 $(-\infty, 0.62) \cup (1.62, \infty)$

12 $(-0.22, 0) \cup (2.22, \infty)$