

Algebra II - techniques 1

Multiple Choice Test

1. The solution of the inequality $4x + 1 < 8$ is:

- (a) $x < 5$ (b) $x < \frac{7}{4}$
(c) $x < \frac{9}{4}$ (d) $x < 3$
(e) I don't know

2. The solution of the inequality $5x - 1 < x$ is:

- (a) $x < \frac{1}{5}$ (b) $x < \frac{1}{4}$
(c) $x < \frac{1}{6}$ (d) $x < 0$
(e) I don't know

3. The solution of the inequality $2(x + 1) - 2 > x - 3$ is:

- (a) $x < 3$ (b) $x > -2$
(c) $x > -\frac{2}{3}$ (d) $x > -3$
(e) I don't know

4. The solution of the inequality $4 \leq 2 - x < 7$ is:

- (a) $-5 < x \leq -2$ (b) $2 \leq x < 7$
(c) $6 \leq x < 9$ (d) $x \leq 6$ and $x > -2$
(e) I don't know

5. The solution of the inequality $x^2 - 4 < 0$ is:

- (a) $0 < x < 4$ (b) $0 < x < 2$
(c) $-2 < x < 2$ (d) $x > 2$
(e) I don't know.

6. The solution of the inequality $x^2 \geq 16$ is:

- (a) $x \geq 4$ (b) $x \geq 8$ and $x \leq -8$
(c) $x \geq -4$ (d) $x \geq 4$ and $x \leq -4$
(e) I don't know.

Additional Mathematics

10/1/05

7. The solution of the inequality $x^2 - 9x < 0$ is:

- (a) There are no values of x which satisfy this inequality. (b) $-3 < x < 3$
(c) $x > 3$ and $x < -3$ (d) $0 < x < 9$
(e) I don't know.

8. The solution of the inequality $x^2 - 4x + 3 < 0$ is:

- (a) $1 < x < 3$ (b) $-3 < x < -1$
(c) $x > 3$ and $x < 1$ (d) There are no values of x which satisfy this inequality.
(e) I don't know.

9. The solution of the inequality $x^2 - 5x + 6 > 0$ is:

- (a) $2 < x < 3$ (b) $x > 6$ and $x < 1$
(c) $x > 3$ and $x < 2$ (d) There are no values of x which satisfy this inequality.
(e) I don't know.

10. The solution of the inequality $x^2 + x + 6 < 0$ is:

- (a) $-2 < x < 3$ (b) There are no values of x which satisfy this inequality.
(c) $x > 6$ and $x < 1$ (d) $x > 3$ and $x < -2$
(e) I don't know.