

[07-09-09C-T10-Problems]

Quadratic inequalities

■ **Answer the following using interval notation.**

A graph is not required, but may be helpful to you.

[1] Find all values of x for which $x^2 - x + 10 < 12$ is true.

[2] Find all values of x for which $3x^2 - 24x + 33 < -12$ is true.

[3] Find all values of x for which $x^2 + 1 \leq 5$ is true.

[4] Find all values of x for which $(x - \sqrt{3})(x + \sqrt{3}) > 1$ is true.

[07-09-09C-T10-Answers]

Quadratic inequalities

[1] $(-1, 2)$

[2] $(3, 5)$

[3] $[-2, 2]$

[4] $(-\infty, -2) \cup (2, \infty +)$