

# QUADRATIC INEQUALITIES

Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_

## A N S W E R S

1a

---

1b

---

2a

---

2b

---

3a

---

3b

---

Find the solution set of the following inequalities;

1. a.  $-2x^2 - 5x + 3 \leq 0$

b.  $-2x^2 - x + 6 \geq 0$

2. a.  $x^2 - 2x - 15 \leq 0$

b.  $x^2 - 5x + 6 \leq 0$

3. a.  $\frac{(x-4)(3x+1)}{(x+3)(2x+5)} < 0$

b.  $\frac{(2x-1)(x+5)}{(3x+2)(x-3)} > 0$

# B

# QUADRATIC INEQUALITIES

Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_

## A N S W E R S

1a

---

1b

---

2a

---

2b

---

3a

---

3b

---

1. a. Find the solution set of inequality  $0,8x^2 \leq x + 0,3$  in the interval  $\left[1\frac{1}{3}; 2\right]$

b. Find the solution set of inequality  $0,6x^2 \leq 0,5 - 1,3x$  in the interval  $\left[\frac{1}{4}; 1\right]$

2. a. Find the positive values of  $x$  that satisfies the inequality  $x^2 - 2x \leq 2$ ?

b. Find the negative values of  $x$  that satisfies the inequality  $x^2 + 2x \leq 1$ ?

3. a. Show that the inequality  $-y^2 + \frac{2}{3}y - \frac{1}{9} \leq 0$  is satisfied for all values of  $y$ .

b. Show that the inequality  $-3z^2 + 2z - \frac{1}{3} > 0$  is not satisfied for any value of  $z$ .

# C