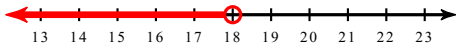
Algebra 1 Name_____ ID: 1

Chapter 6 Review

Date_____ Period____

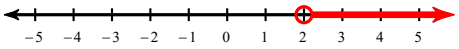
Solve each inequality and graph its solution.

1) $8 > v - 10$



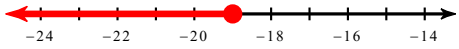
$v < 18$

2) $-17k < -34$



$k > 2$

3) $x - 4 \leq -23$

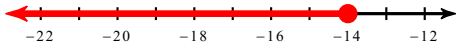


$x \leq -19$

4) $10 + v < 6$

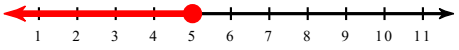
$v < -4$

5) $-16 \geq x - 2$



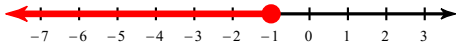
$x \leq -14$

6) $x - 13 \leq -8$



$x \leq 5$

7) $-9 \geq m - 8$

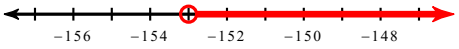


$m \leq -1$

8) $-11m \geq 55$

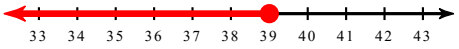
$m \leq -5$

9) $-17 < \frac{k}{9}$



$k > -153$

10) $13 \geq \frac{p}{3}$



$p \leq 39$

Solve each inequality.

11) $10 \leq 10 + \frac{p}{3}$

$p \geq 0$

12) $-10(a - 5) \leq -80$

$a \geq 13$

13) $-42 > -2 + 2x$

$x < -20$

14) $-6 > -8b - 6$

$b > 0$

15) $6(-10 + m) > -78$

$m > -3$

16) $1 \geq \frac{6 + p}{15}$

$p \leq 9$

17) $200 > 10(x + 2)$

$x < 18$

18) $\frac{r + 2}{2} > 5$

$r > 8$

19) $-55 \le -7 + 8m$

$m \ge -6$

20) $7 \ge \frac{1 + v}{2}$

$v \le 13$

21) $-97 > 4(1 + 3n) - 5$

$n < -8$

22) $-96 < 8a - 3(6 + 7a)$

$a < 6$

23) $7(b - 5) < -91$

$b < -8$

24) $-5m - 5(7m - 4) \le -100$

$m \ge 3$

25) $5(-8 - 3x) + 6 \le -94$

$x \ge 4$

26) $6 + 5(b - 2) > -4b - 31$

$b > -3$

27) $-3(4r + 2) \ge 19 - 7r$

$r \le -5$

28) $-4 - 4(2 + 7n) < -n - 12$

$n > 0$

29) $5 - 8(x - 1) \le -2x + 13$

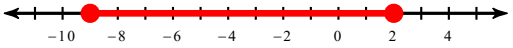
$x \ge 0$

30) $3r + 23 \le -(1 + 2r) - 3r$

$r \le -3$

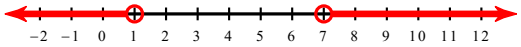
Solve each compound inequality and graph its solution.

31) $-29 \le 7 + 4b \le 15$



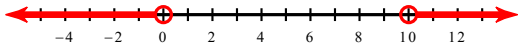
$-9 \le b \le 2$

32) $-x + 6 < -1$ or $-6 - 7x > -13$



$x > 7$ or $x < 1$

33) $5 - 10x < -95$ or $8 + 4x < 8$

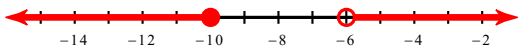


$x > 10$ or $x < 0$

34) $-3x + 9 \ge 3$ or $3x - 1 \ge 11$

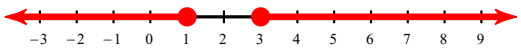
$x \le 2$ or $x \ge 4$

35) $-8x + 1 \ge 81$ or $9 - 2x < 21$



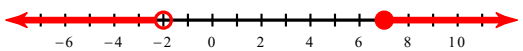
$x \le -10$ or $x > -6$

36) $2 + 6k \le 8$ or $2 - 5k \le -13$



$k \le 1$ or $k \ge 3$

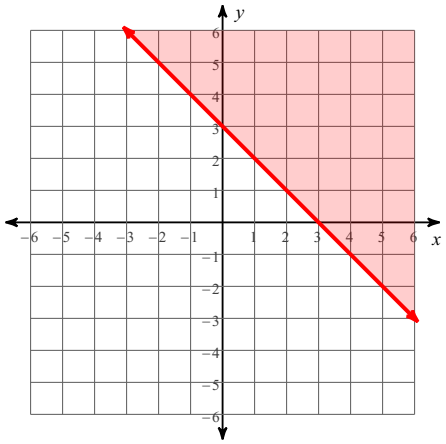
37) $5 - 7k \le -44$ or $10k - 2 < -22$



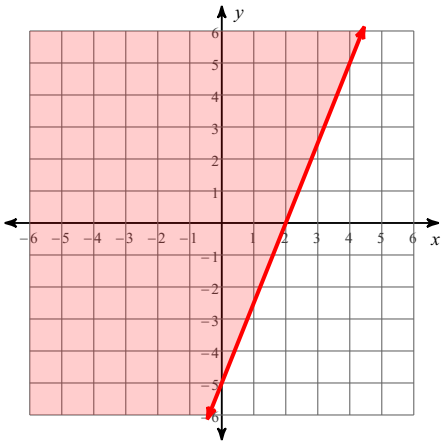
$k \ge 7$ or $k < -2$

Sketch the graph of each linear inequality.

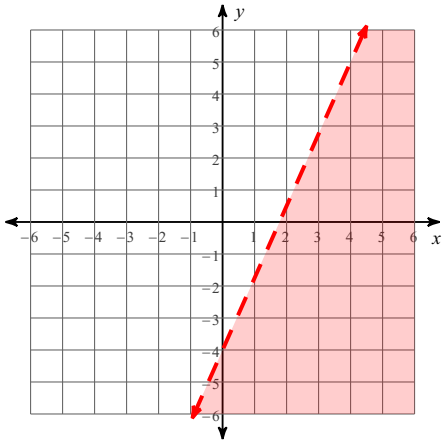
38) $y \geq -x + 3$



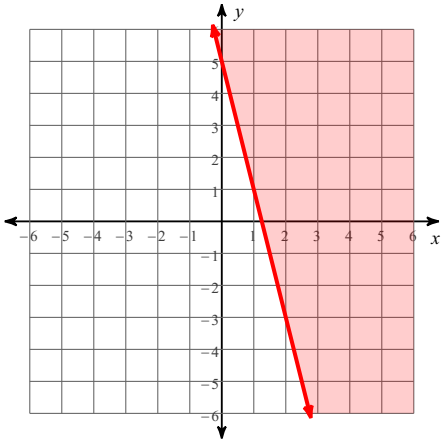
39) $y \geq \frac{5}{2}x - 5$



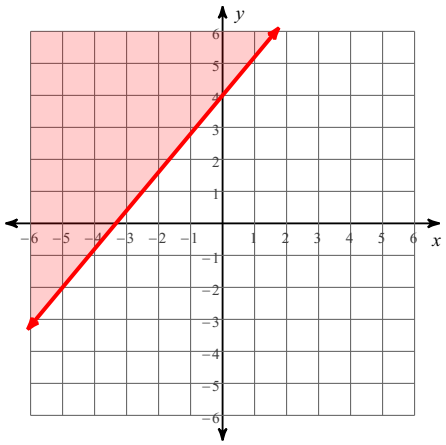
40) $y < \frac{9}{4}x - 4$



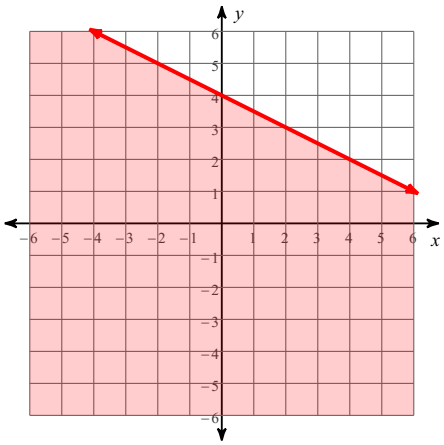
41) $4x + y \geq 5$



42) $6x - 5y \leq -20$



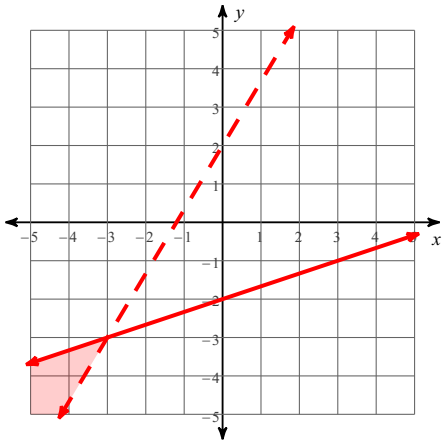
43) $x + 2y \leq 8$



Sketch the solution to each system of inequalities.

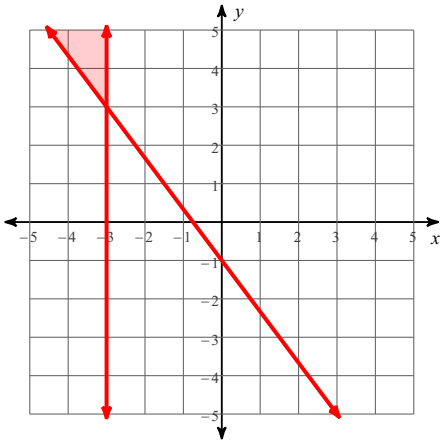
44) $y \leq \frac{1}{3}x - 2$

$y > \frac{5}{3}x + 2$



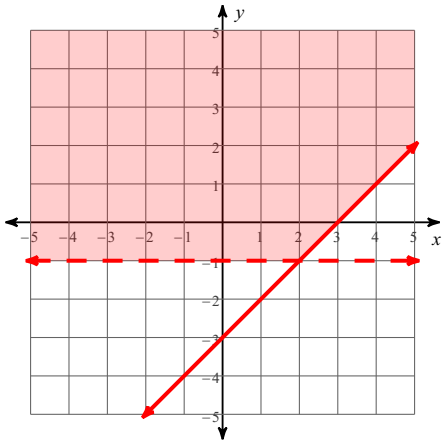
45) $y \geq -\frac{4}{3}x - 1$

$x \leq -3$



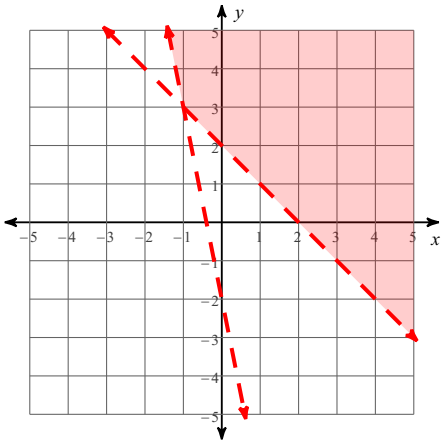
46) $y \geq x - 3$

$y > -1$



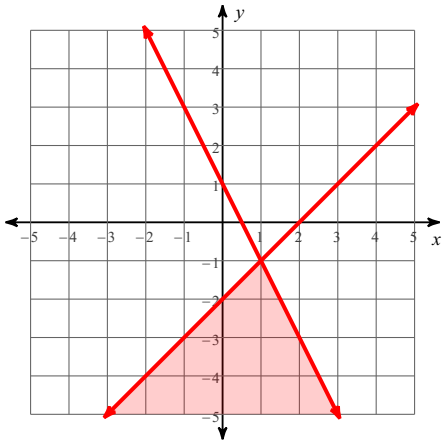
47) $5x + y > -2$

$x + y > 2$



48) $2x + y \leq 1$

$x - y \geq 2$



49) $3x - y < -2$

$x + y \geq -2$