

## Mixed Review 4, Part 2

Date \_\_\_\_\_ Period \_\_\_\_\_

**Evaluate each function.**

1)  $f(x) = x^2 + x$ ; Find  $f(-3)$

2)  $k(x) = x^2 - 3x$ ; Find  $k(7)$

3)  $h(x) = \frac{1}{3}x^2 - \frac{2}{3}x$ ; Find  $h\left(-\frac{1}{2}\right)$

4)  $f(x) = x^2 - 2$ ; Find  $f\left(\frac{5}{4}\right)$

**Solve each equation.**

5)  $72 = -6(4 + 8x)$

6)  $8(n + 6) + 3n = 48$

7)  $-7 = 5 - 2(m + 1)$

8)  $50 = 4(6a - 1) - 6a$

9)  $-3(n + 4) = -(n - 2)$

10)  $3(x + 1) = 6(x - 5) - 3$

11)  $-7(n + 3) = -8(n + 3) + 3$

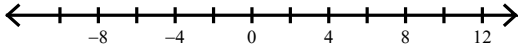
12)  $3(n - 7) - 7 = 3(2 + 2n) + 5$

13)  $-7(5p + 4) + 7 = -7(-1 + 5p)$

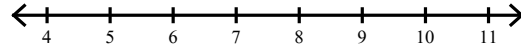
14)  $r - 3r = -(r + 2) + 3(4r + 5)$

Solve each compound inequality and graph its solution.

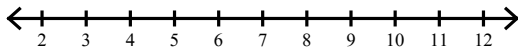
15)  $a - 4 < -11$  or  $-1 - 5a \leq -46$



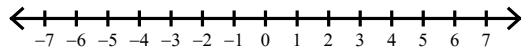
16)  $28 < 5p - 2 < 48$



17)  $5n + 6 \geq 51$  or  $5n + 2 < 37$

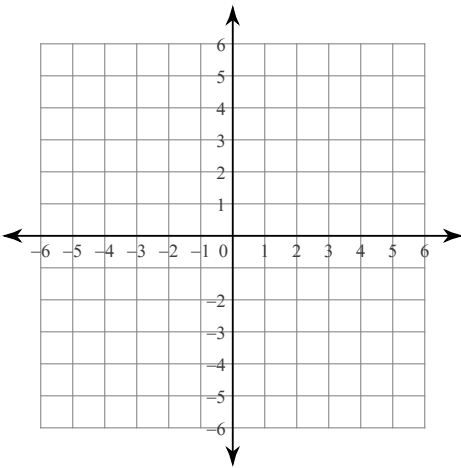


18)  $-10 \leq 4x + 6 < 22$

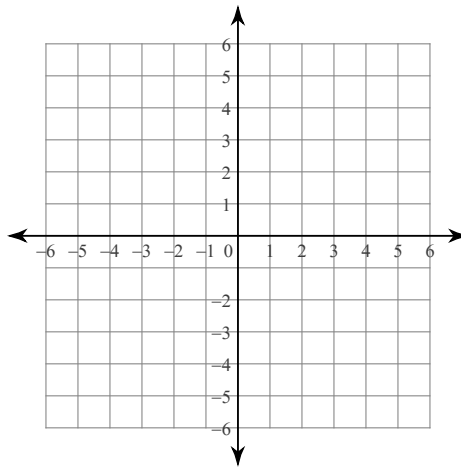


Sketch the graph of each linear inequality.

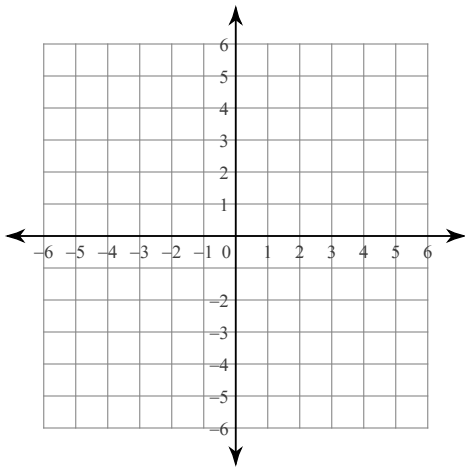
19)  $y \leq \frac{4}{3}x - 5$



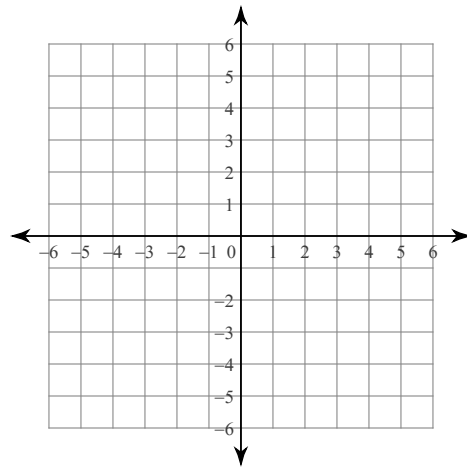
20)  $y < \frac{1}{3}x - 2$



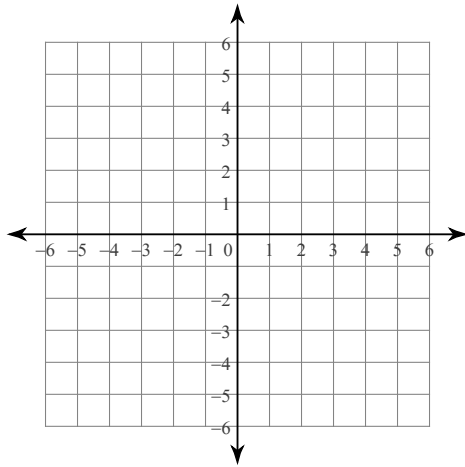
21)  $y > x + 3$



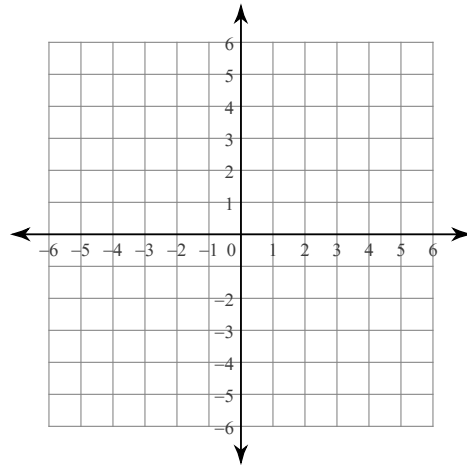
22)  $y \leq -x$



23)  $y > -4$



24)  $y \geq 7x - 3$



# Answers to Mixed Review 4, Part 2 (ID: 1)

1) 6

2) 28

3)  $\frac{5}{12}$

4)  $-\frac{7}{16}$

5)  $\{-2\}$

6)  $\{0\}$

7)  $\{5\}$

8)  $\{3\}$

9)  $\{-7\}$

10)  $\{12\}$

11)  $\{0\}$

12)  $\{-13\}$

13) No solution.

14)  $\{-1\}$

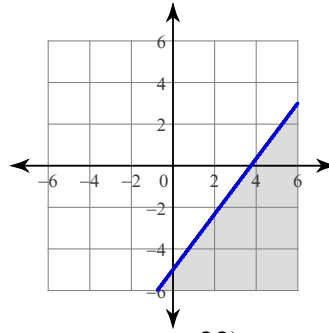
15)  $a < -7$  or  $a \geq 9$  :

16)  $6 < p < 10$  :

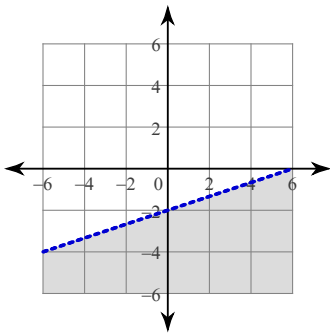
17)  $n \geq 9$  or  $n < 7$  :

18)  $-4 \leq x < 4$  :

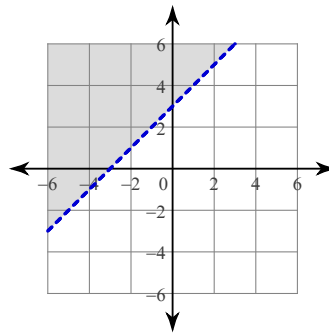
19)



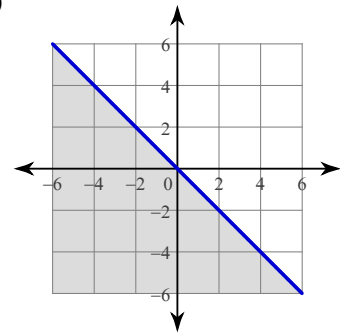
20)



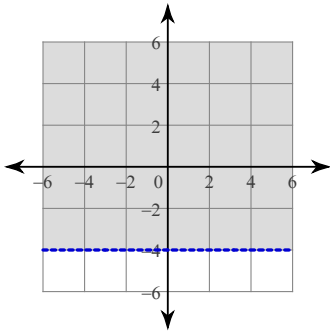
21)



22)



23)



24)

