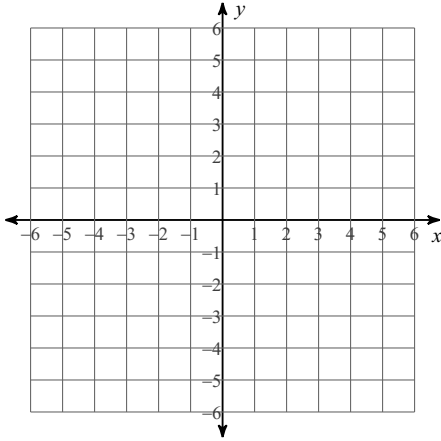


Assignment

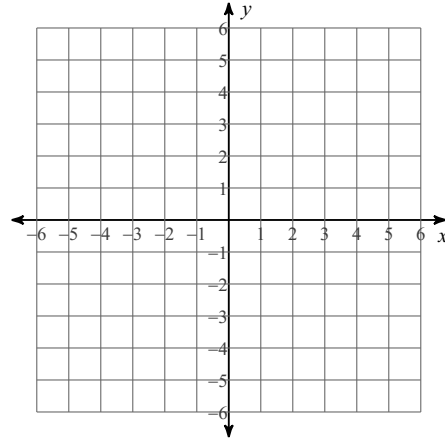
Date _____ Period _____

Sketch the graph of each line.

1) $8x + 9 = 3y$



2) $-4 = y + 6x$

**Write the slope-intercept form of the equation of the line through the given points.**

3) through: $(0, -4)$ and $(3, 4)$

4) through: $(2, -2)$ and $(0, -4)$

Write the slope-intercept form of the equation of the line described.

5) through: $(-4, 1)$, perp. to $y = -x + 1$

6) through: $(-2, -2)$, parallel to $y = -\frac{3}{2}x + 4$

Factor each completely.

7) $25n^2 - 20n + 4$

8) $4x^2 - 1$

9) $n^3 + 6n^2 - 40n$

10) $x^2 + 4x + 3$

11) $5n^3 - 5n^2 - 150n$

12) $3b^2 - 12b + 9$

Solve each equation by taking square roots.

13) $6b^2 + 1 = 385$

14) $3a^2 + 5 = 305$

Solve each equation by completing the square.

15) $m^2 - 14m - 57 = 5$

16) $m^2 + 14m - 17 = 7$

Solve each equation with the quadratic formula.

17) $6x^2 = 72 - 11x$

18) $2x^2 - 9 = 7x$

Find each product.

19) $(7x + 3)(3x - 8)$

20) $(2a + 4)(5a - 7)$

21) $(-6a^2 - 5a - 1)(4a^2 + a + 1)$

22) $(-7a^2 + 2a + 7)(6a^2 - a - 6)$

Simplify. Your answer should contain only positive exponents.

23) $(ba^3)^{-3} \cdot -a^3$

24) $(m^{-5})^0 \cdot m^{-1}n^5$

25) $u^{-3} \cdot (vu^{-2})^4$

26) $(-ba^5)^2 \cdot -a^4b^4$

27) $(-x^{-4}y^3)^{-2} \cdot x^0y^{-4}$

28) $((a^{-1}b^4 \cdot a^0b^3)^3 \cdot a^0b^3)^{-5}$

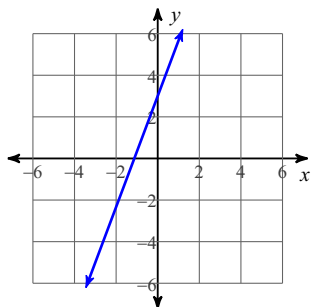
Simplify. Use absolute value signs when necessary.

29) $4\sqrt[3]{-40x^5yz^4}$

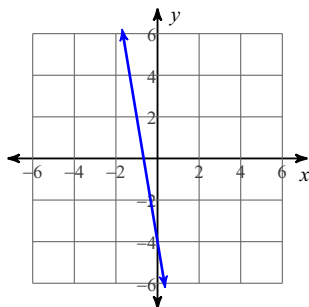
30) $-10\sqrt[3]{40x^5yz}$

Answers to Assignment (ID: 1)

1)



2)



$$3) y = \frac{8}{3}x - 4$$

4) $y = x - 4$

5) $y = x + 5$

6) $y = -\frac{3}{2}x - 5$

7) $(5n - 2)^2$

8) $(2x + 1)(2x - 1)$

9) $n(n - 4)(n + 10)$

10) $(x + 3)(x + 1)$

11) $5n(n + 5)(n - 6)$

12) $3(b - 1)(b - 3)$

13) $\{8, -8\}$

14) $\{10, -10\}$

15) $\{7 + \sqrt{111}, 7 - \sqrt{111}\}$

16) $\{-7 + \sqrt{73}, -7 - \sqrt{73}\}$

17) $\left\{\frac{8}{3}, -\frac{9}{2}\right\}$

18) $\left\{\frac{9}{2}, -1\right\}$

19) $21x^2 - 47x - 24$

20) $10a^2 + 6a - 28$

21) $-24a^4 - 26a^3 - 15a^2 - 6a - 1$

22) $-42a^4 + 19a^3 + 82a^2 - 19a - 42$

23) $-\frac{1}{b^3a^6}$

24) $\frac{n^5}{m}$

25) $\frac{v^4}{u^{11}}$

26) $-b^6a^{14}$

27) $\frac{x^8}{y^{10}}$

28) $\frac{a^{15}}{b^{120}}$

29) $-8xz\sqrt[3]{5x^2yz}$

30) $-20x\sqrt[3]{5x^2yz}$