

Homework 25.2

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Simplify. Your answer should contain only positive exponents.

1) $2v^4 \cdot v$

2) $3x^2 \cdot x^2$

3) $4x^2 \cdot x^0$

4) $4n^{-2} \cdot n^{-2}$

5) $-3uv^{-1} \cdot -3u^4v^3$

6) $2x^3y^2 \cdot -3y^3 \cdot 4x$

7) $(4n^3)^4$

8) $(3x)^4$

9) $(x^2)^3$

10) $(3n^{-3})^4$

11) $2x^2y^{-3} \cdot (xy)^4 \cdot y^{-2}$

12) $(x^{-4}y^2 \cdot xy^4)^3$

13) $\frac{3x^{-1}y^4}{x^4}$

14) $\frac{x^0y^3}{2y^{-2}}$

15) $\frac{uv^2}{u^2v^{-4}}$

16) $\frac{x^0y^{-4}}{x^{-2}y^{-3}}$

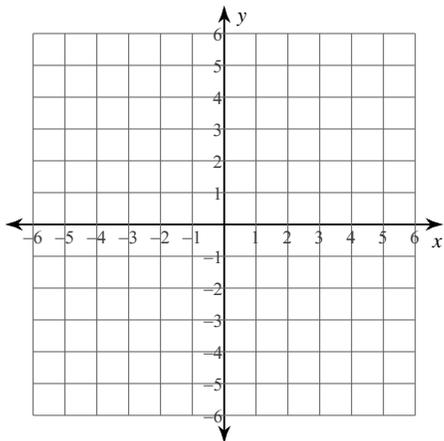
Solve for $y = mx + b$, and state the slope and the y - intercept.

17) $3x + 4y = 12$

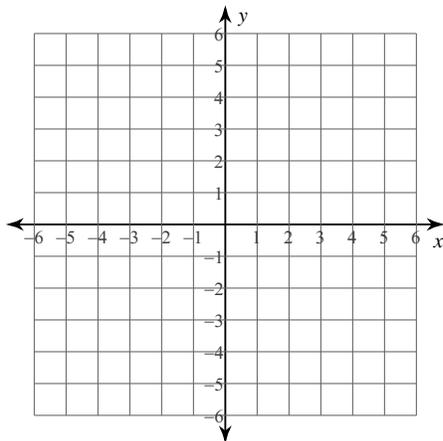
18) $x = 2$

Sketch the graph of each linear inequality.

19) $y \leq -\frac{9}{2}x - 5$



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



Answers to Homework 25.2

1) $2v^5$

2) $3x^4$

3) $4x^2$

4) $\frac{4}{n^4}$

5) $9u^5v^2$

6) $-24x^4y^5$

7) $256n^{12}$

8) $81x^4$

9) x^6

10) $\frac{81}{n^{12}}$

11) $\frac{2x^6}{y}$

12) $\frac{y^{18}}{x^9}$

13) $\frac{3y^4}{x^5}$

14) $\frac{y^5}{2}$

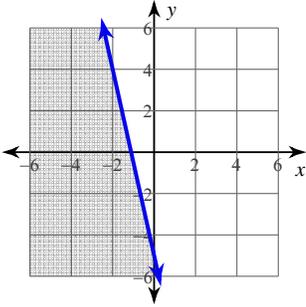
15) $\frac{v^6}{u}$

16) $\frac{x^2}{y}$

17) $y = -\frac{3}{4}x + 3, m = -\frac{3}{4}, b = 3$

18) $x = 2$, no slope/undefined, no y - intercept

19)



20)

