

## Quiz 25.2

Simplify. Your answer should contain only positive exponents.

1)  $2v^4 \cdot v^{-4} \cdot 4v^3$

- A)  $8v^3$       B)  $8v^2$   
 C) 3      D)  $\frac{4}{v^2}$

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

- A)  $2x^5$       B)  $\frac{8}{x^6}$   
 C)  $\frac{8}{x^2}$       D)  $2x^7$

3)  $-2x^{-1} \cdot -4x^4y^4$

- A)  $-\frac{12y^4}{x}$       B)  $-4x^2$   
 C)  $8x^3y^4$       D)  $12x^3y^4$

4)  $(3x)^2$

- A)  $\frac{1}{x^{12}}$       B)  $9x^2$   
 C)  $256x^{12}$       D)  $\frac{1}{x^6}$

5)  $(2a^2)^4$

- A)  $\frac{1}{64a^3}$       B)  $16a^8$   
 C)  $\frac{1}{a^8}$       D)  $\frac{a^4}{9}$

6)  $(2x^{-1})^2 \cdot y^2$

- A)  $\frac{x^2}{y^{10}}$       B)  $\frac{16y^8}{x^{16}}$   
 C)  $\frac{1}{2x^6y^8}$       D)  $\frac{4y^2}{x^2}$

7)  $\frac{2u^3v^{-2}}{3uv^0}$

- A)  $\frac{1}{2v^5u}$       B)  $\frac{u^3}{v}$   
 C)  $\frac{2u^2}{3v^2}$       D)  $\frac{1}{vu^2}$

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

- A)  $\frac{x^4}{3y}$       B)  $2x^2$   
 C)  $\frac{1}{3xy^3}$       D)  $\frac{x^2}{y^5}$

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

9)  $x - 2y = 8$

- A)  $y = 4x - \frac{1}{2}$ ,  $m = 4$ ,  $b = -\frac{1}{2}$   
 B)  $y = -\frac{1}{2}x - 4$ ,  $m = -\frac{1}{2}$ ,  $b = -4$   
 C)  $y = \frac{1}{2}x - 4$ ,  $m = \frac{1}{2}$ ,  $b = -4$   
 D)  $y = -4x - \frac{1}{2}$ ,  $m = -4$ ,  $b = -\frac{1}{2}$

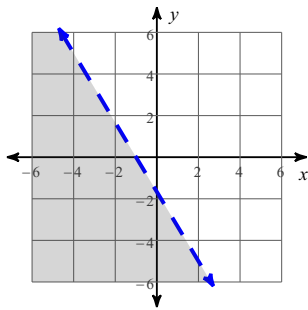
10)  $x - 3y = -9$

- A)  $y = 3x + \frac{2}{3}$ ,  $m = 3$ ,  $b = \frac{2}{3}$   
 B)  $y = \frac{1}{3}x + \frac{2}{3}$ ,  $m = \frac{1}{3}$ ,  $b = \frac{2}{3}$   
 C)  $y = \frac{1}{3}x + 3$ ,  $m = \frac{1}{3}$ ,  $b = 3$   
 D)  $y = \frac{2}{3}x + 3$ ,  $m = \frac{2}{3}$ ,  $b = 3$

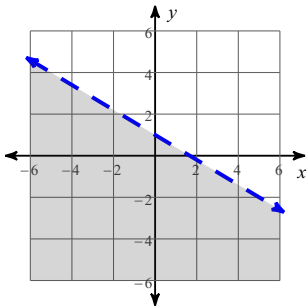
Sketch the graph of each linear inequality.

11)  $y \geq -\frac{3}{5}x - 1$

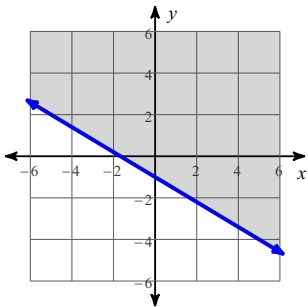
A)



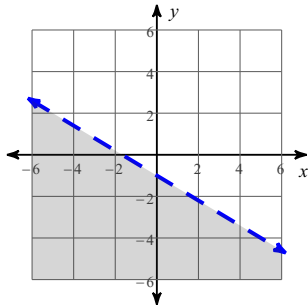
B)



C)

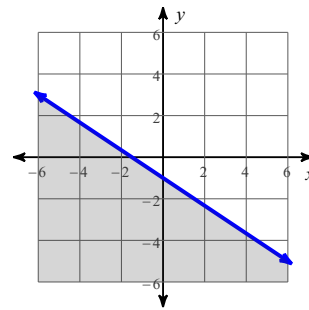


D)

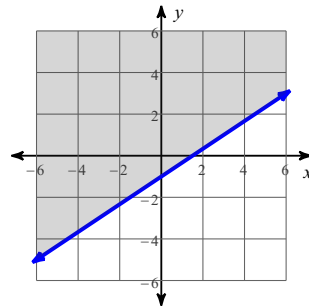


12)  $y \leq \frac{2}{3}x + 1$

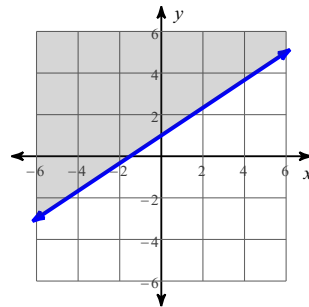
A)



B)



C)



D)

