

Semester 1 Exam Practice - Part 3

Solve each equation.

1) $5(-12 - 4n) = -5n - 3(2 - n)$

2) $-6m + 6(5 - 8m) = -6(12m - 2)$

3) $-11(x - 4) = -8 - 7(4 + x)$

4) $-r + 2(r + 3) = -9 + 2(r + 12)$

Simplify. Your answer should contain only positive exponents.

5) $\frac{(v^5)^{-4}(u^{-1}v^5)^0}{v}$

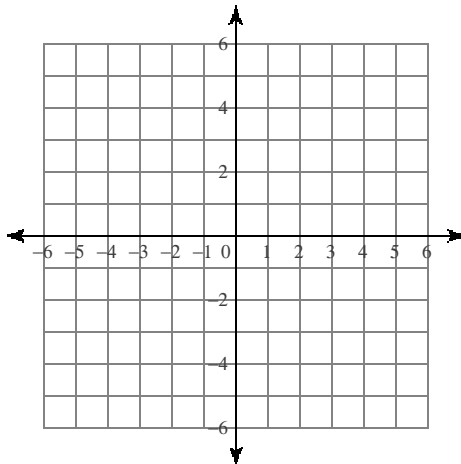
6) $\frac{(y^{-1})^5}{y^0 \cdot x^0 y^0}$

7) $\frac{a^0 b^3 \cdot (a^2 b^4)^0}{ba^0}$

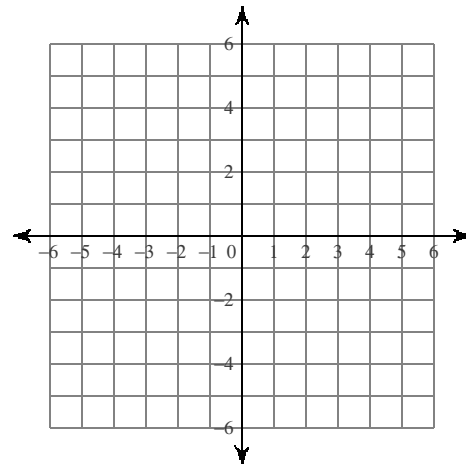
8) $\frac{a^4 \cdot ab^5}{(a^3 b^3)^4}$

Sketch the graph of each line (TIP: solve for y first).

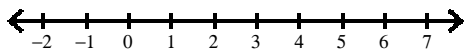
9) $8x + 15 = 3y$



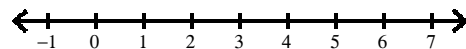
10) $-2y = -2x$

**Solve each inequality and graph its solution.**

11) $7(1 - 3v) \geq -19 - 8v$



12) $-21 + 2m < -6(8 - 2m) - m$

**Solve each system.**

13) $\begin{aligned} 12y &= -15 - 3x \\ -2y - x - 1 &= 0 \end{aligned}$

14) $\begin{aligned} 2x - 2y &= -4 \\ -3x + y &= -8 \end{aligned}$

Answers to Semester 1 Exam Practice - Part 3

1) $\{-3\}$

2) $\{-1\}$

3) $\{20\}$

4) $\{-9\}$

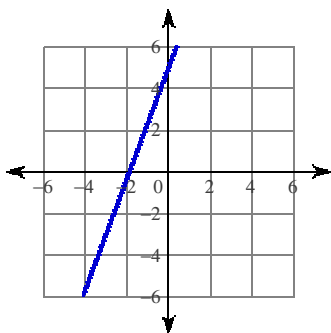
5) $\frac{1}{v^{21}}$

6) $\frac{1}{y^5}$

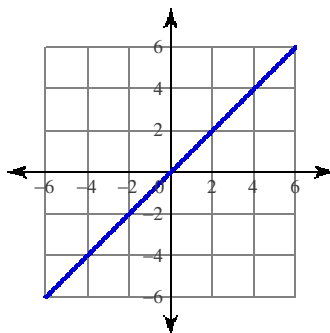
7) b^2

8) $a^{17}b^{17}$

9)



10)



11) $v \leq 2$:

13) $(3, -2)$

14) $(5, 7)$

12) $m > 3$: