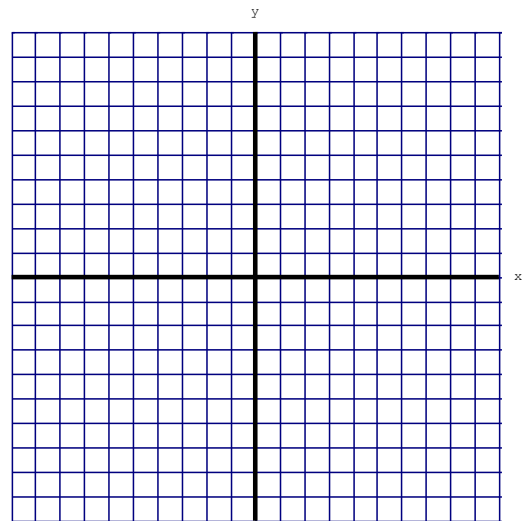# Unit 2 HW 17

Name_____ Date_____ Period_____

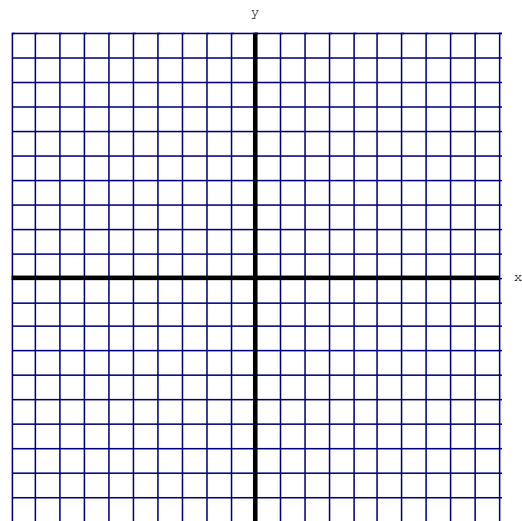Simplify

1. $-6(5)^2 + 68$

2. $12(-6)^2 + 25(-6) - 200$

Solve the system of equations by graphing.

3. $\begin{cases} y = -\frac{2}{3}x - 5 \\ 3x - 2y = -16 \end{cases}$

Solve the system of equations algebraically (check with graphing)

4. $\begin{cases} y = \frac{3}{2}x - 1 \\ x + 2y = -18 \end{cases}$

Unit 2 HW 17

Name_____ Date_____ Period_____

Simplify the expressions.

5. $(8x^3)(5x^4)$

6. $(3a^4b^2)^3$

7. $\dfrac{18c^6d^2}{6c^3d^8}$

Solve using dimension analysis.

8. I'm trying to find the best garden hose for my house. I'd like it to have the best water pressure possible. Based on reviews, I should choose the Camco, Scott, or Water Right brand.

- Camco says it can push out 2.7 pints of water per second.
- Scott says it can push out 1174 gallons of water per hour.
- Water Right it can push out 341 cups of water per min.

Which hose should I choose?

9. After 30 baseball games, A-Rod had 25 hits. After 100 games he had 80 hits. At this rate how many games would he have to play to reach 125 hits? (SHOW WORK)