

Review Semester 1

Date _____ Period _____

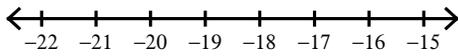
Solve each equation.

1) $-5(1 + 2x) = 25$

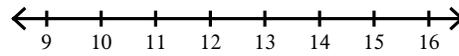
2) $8(4 + 2v) = -16$

Solve each inequality and graph its solution.

3) $-240 > 12x$



4) $7 \leq -5 + n$

**Solve each system by elimination.**

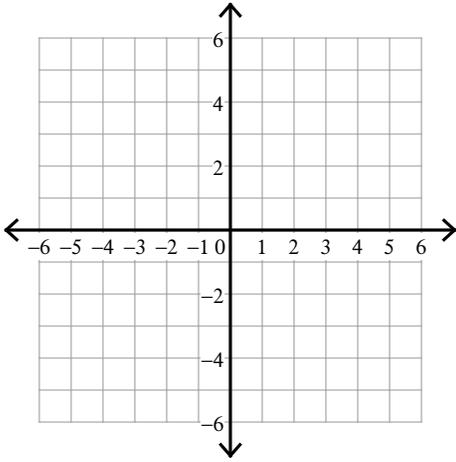
$$5) \begin{aligned} -4x - 18y &= 12 \\ -x - 9y &= 12 \end{aligned}$$

Solve each system by substitution.

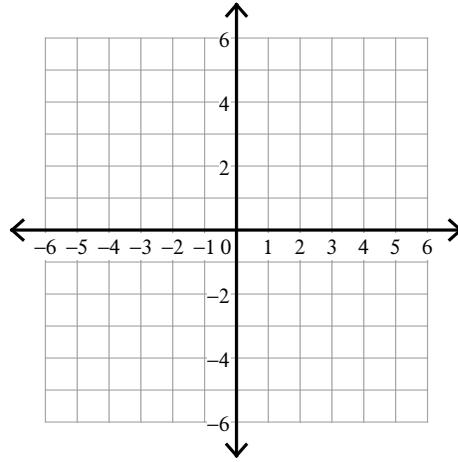
$$6) \begin{aligned} 2x + 4y &= 18 \\ -x + y &= -6 \end{aligned}$$

Sketch the graph of each line.

7) $x - y = -3$



8) $3x - y = 2$



Solve each question. Round your answer to the nearest hundredth.

9) Amy can pick forty bushels of apples in 10 hours. Lisa can pick the same amount in 15 hours. If they worked together how long would it take them?

10) Paul's school is selling tickets to a spring musical. On the first day of ticket sales the school sold 1 adult ticket and 12 student tickets for a total of \$63. The school took in \$266 on the second day by selling 14 adult tickets and 14 student tickets. What is the price each of one adult ticket and one student ticket?

11) 20 kg of mixed nuts containing 40% peanuts were mixed with 5 kg of another kind of mixed nuts that contain 60% peanuts. What percent of the new mixture is peanuts?