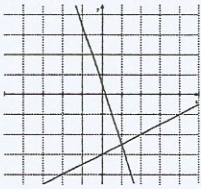


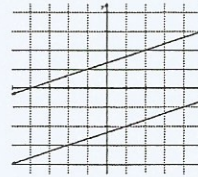
MGSE9-12.A.REI.12

13. Which graph(s) represents a system of linear equations that has at least one common coordinate pair?

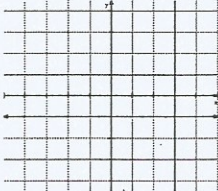
a.



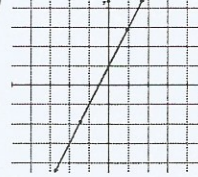
b.



c.



d.



MGSE9-12.A.REI.6

14. Tickets to a movie cost \$7.25 for adults and \$5.50 for students. A group of friends purchased 8 tickets for \$52.75. Write a system of equations to represent this situation. How many adult tickets and student tickets were purchased? (**Hint** - Use substitution)

$x = \# \text{ adult tickets}$ $y = \# \text{ student tickets}$

$$\begin{array}{r}
 x + y = 8 \xrightarrow{-7.25} -7.25x - 7.25y = -58 \\
 7.25x + 5.5y = 52.75 \xrightarrow{-7.25} \underline{7.25x + 5.5y = 52.75} \\
 \hline
 -1.75y = -5.25 \\
 y = 3 \\
 \left. \begin{array}{l} x + y = 8 \\ y = 3 \end{array} \right\} \begin{array}{l} x + 3 = 8 \\ x = 5 \end{array}
 \end{array}$$

5 adult tickets
3 student tickets

MGSE9-12.A.REI.3

15. This equation models the number of minutes, m , it takes Bill and Ted to eat a pizza.

$$\frac{m}{10} + m = 11$$

$$\begin{array}{l}
 m + 10m = 110 \\
 11m = 110 \\
 m = 10
 \end{array}$$

About how many minutes will it take them to wash the dishes?

- a. 9.5 minutes
- b. 9 minutes
- c. 10 minutes
- d. 38 minutes
- e. none of these