

# 8<sup>th</sup> Grade Topic 5 Common Assessment Review

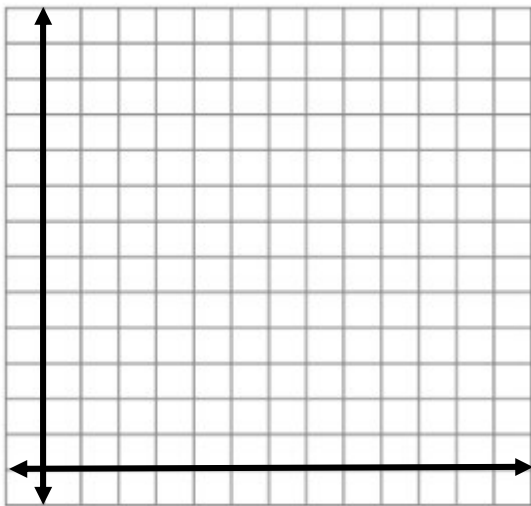
1. Two students are reading a novel. Ashley reads 15 pages per day. Carly reads 10 pages per day, but she starts early and is already on page 25.

Part A Write a system of equations to represent the situation, using  $d$  for days and  $p$  for pages.

Ashley:  $p = \boxed{\phantom{000}} d$

Carly:  $p = \boxed{\phantom{000}} d + \boxed{\phantom{000}}$

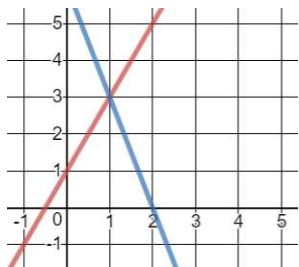
Part B Graph the system of equations.



Part C What does the point of intersection of the graph tell you?

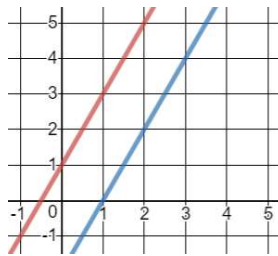
On day  $\boxed{\phantom{00}}$ , both girls should be on page  $\boxed{\phantom{00}}$ .

2. How many solutions does each system of equations have? How do you know?

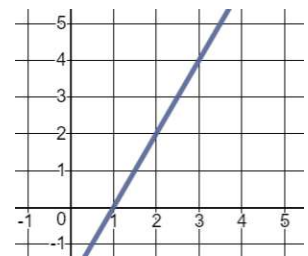


# of solutions  $\underline{\hspace{2cm}}$

Why



$\underline{\hspace{2cm}}$



$\underline{\hspace{2cm}}$

3. Adventure Play sells an mp3 player for \$25.00 and charges \$4.25 per song. King Music sells a player for \$33.00 and charges \$3.75 per song. For how many songs will the cost be the same?

4. Solve the system of equations using elimination. How many solutions does the system have? How do you know?

$$10j + 16k = 18$$

$$5j + 8k = 9$$

5. Solve the system of equations using elimination.

$$12q - 3r = 12$$

$$4q + 9r = 44$$

6. What is the solution of the system of equations? Explain.

$$8x + 10 - y = 0$$

$$5y = 40x + 15$$

7. Use substitution. What is the solution of the system of equations? Explain.

$$y = \frac{1}{4}x + 3$$

$$4y = x + 12$$

The system of equations has	<div>Choose... Choose... no solution infinitely many solutions one solution</div>	The two equations represent	<div>Choose... Choose... intersecting lines the same line parallel lines</div>
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8. Sia sells large candles for \$5 each and small candles for \$3 each. She sold 12 candles for \$44.00.

How many of each size candle did she sell?

9. Bowler World charges \$4.00 to rent shoes and \$1.50 per game. Lucky Spares charges \$2.00 for shoes and \$1.70 per game.

Part A Write a system of equations to represent the situation, using  $g$  for number of games and  $c$  for cost.

Bowler World:  $c =$    $g +$

Lucky Spares:  $c =$    $g +$

Part B For how many games is the cost the same for both locations? What is that cost?

The cost is the same for  games. The cost is  \$.

Be Careful!! Make sure you write the cost in correct dollars and cent form. (ex. 4.50 and not 4.5 )

10. A 30-question test has 104 possible points. There are  $m$  4-point questions and  $n$  2-point questions. How many of each type of questions are on the test?