Unit 4, Lesson 1: Number Puzzles

1. Tyler reads \( \frac{2}{15} \) of a book on Monday, \( \frac{1}{3} \) of it on Tuesday, \( \frac{2}{9} \) of it on Wednesday, and \( \frac{3}{4} \) of the remainder on Thursday. If he still has 14 pages left to read on Friday, how many pages are there in the book?

2. Clare asks Andre to play the following number puzzle:
   - Pick a number
   - Add 2
   - Multiply by 3
   - Subtract 7
   - Add your original number

   Andre’s final result is 27. Which number did he start with?

3. In a basketball game, Elena scores twice as many points as Tyler. Tyler scores four points fewer than Noah, and Noah scores three times as many points as Mai. If Mai scores 5 points, how many points did Elena score? Explain your reasoning.

4. Select all of the given points in the coordinate plane that lie on the graph of the linear equation \( 4x - y = 3 \).
   - A. (-1, -7)
   - B. (0, 3)
   - C. \( \left( \frac{3}{4}, 0 \right) \)
   - D. (1, 1)
   - E. (2, 5)
5. A store is designing the space for rows of nested shopping carts. Each row has a starting cart that is 4 feet long, followed by the nested carts (so 0 nested carts means there's just the starting cart). The store measured a row of 13 nested carts to be 23.5 feet long, and a row of 18 nested carts to be 31 feet long.

a. Create a graph of the situation.

b. How much does each nested cart add to the length of the row? Explain your reasoning.

c. If the store design allows for 43 feet for each row, how many total carts fit in a row?
(from Unit 3, Lesson 5)
Unit 4, Lesson 2: Keeping the Equation Balanced

1. Which of the changes would keep the hanger in balance? Select all that apply.

   A. Adding two circles on the left and a square on the right
   B. Adding 2 triangles to each side
   C. Adding two circles on the right and a square on the left
   D. Adding a circle on the left and a square on the right
   E. Adding a triangle on the left and a square on the right

2. Here is a balanced hanger diagram.

   Each triangle weighs 2.5 pounds, each circle weighs 3 pounds, and $x$ represents the weight of each square. Select all equations that represent the hanger.

   A. $x + x + x + x + 11 = x + 11.5$
   B. $2x = 0.5$
   C. $4x + 5 + 6 = 2x + 2.5 + 6$
   D. $2x + 2.5 = 3$
   E. $4x + 2.5 + 2.5 + 3 + 3 = 2x + 2.5 + 3 + 3 + 3$

3. What is the weight of a square if a triangle weighs 4 grams?
4. Andre came up with the following puzzle. “I am three years younger than my brother, and I am 2 years older than my sister. My mom’s age is one less than three times my brother’s age. When you add all our ages, you get 87. What are our ages?”

a. Try to solve the puzzle.

b. Jada writes this equation for the sum of the ages: \((x) + (x + 3) + (x - 2) + 3(x + 3) - 1 = 87\). Explain the meaning of the variable and each term of the equation.

c. Write the equation with fewer terms.

d. Solve the puzzle if you haven’t already.

(from Unit 4, Lesson 1)

5. These two lines are parallel. Write an equation for each.

Explain your reasoning.
(from Unit 3, Lesson 8)
1. In this hanger, the weight of the triangle is $x$ and the weight of the square is $y$.

   a. Write an equation using $x$ and $y$ to represent the hanger.

   b. If $x$ is 6, what is $y$?

2. Match each set of equations with the move that turned the first equation into the second.

   A. $6x + 9 = 4x - 3$
      \[ 2x + 9 = -3 \]
   
   B. $-4(5x - 7) = -18$
      \[ 5x - 7 = 4.5 \]

   C. $8 - 10x = 7 + 5x$
      \[ 4 - 10x = 3 + 5x \]

   D. $\frac{-5x}{4} = 4$
      \[ 5x = -16 \]

   E. $12x + 4 = 20x + 24$
      \[ 3x + 1 = 5x + 6 \]

   1. Multiply both sides by $\frac{1}{4}$
   
   2. Multiply both sides by -4
   
   3. Multiply both sides by $\frac{1}{4}$
   
   4. Add $-4x$ to both sides
   
   5. Add -4 to both sides

3. Andre and Diego were each trying to solve $2x + 6 = 3x - 8$. Describe the first step they each make to the equation.

   a. The result of Andre’s first step was $-x + 6 = -8$. 
b. The result of Diego’s first step was \( 6 = x - 8 \).

4. a. Complete the table with values for \( x \) or \( y \) that make this equation true: \( 3x + y = 15 \).

<table>
<thead>
<tr>
<th></th>
<th>2</th>
<th>6</th>
<th>0</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>( x )</td>
<td>3</td>
<td>0</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>( y )</td>
<td>3</td>
<td>0</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

b. Create a graph, plot these points, and find the slope of the line that goes through them.

(from Unit 3, Lesson 11)

5. Select all the situations for which only zero or positive solutions make sense.

A. Measuring temperature in degrees Celsius at an Arctic outpost each day in January.
B. The height of a candle as it burns over an hour.
C. The elevation above sea level of a hiker descending into a canyon.
D. The number of students remaining in school after 6:00 p.m.
E. A bank account balance over a year.
F. The temperature in degrees Fahrenheit of an oven used on a hot summer day.
(from Unit 3, Lesson 14)
Unit 4, Lesson 4: More Balanced Moves

1. Mai and Tyler work on the equation \( \frac{2}{5}b + 1 = -11 \) together. Mai’s solution is \( b = -25 \) and Tyler’s is \( b = -28 \). Here is their work:

Mai:
\[
\begin{align*}
\frac{2}{5}b + 1 &= -11 \\
\frac{2}{5}b &= -10 \\
b &= -10 \cdot \frac{5}{2} \\
b &= -25
\end{align*}
\]

Tyler:
\[
\begin{align*}
\frac{2}{5}b + 1 &= -11 \\
2b + 1 &= -55 \\
2b &= -56 \\
b &= -28
\end{align*}
\]

Do you agree with their solutions? Explain or show your reasoning.

2. Solve \( 3(x - 4) = 12x \)

3. Describe what is being done in each step while solving the equation.

   a. \( 2(-3x + 4) = 5x + 2 \)
   b. \( -6x + 8 = 5x + 2 \)
   c. \( 8 = 11x + 2 \)
   d. \( 6 = 11x \)
   e. \( x = \frac{6}{11} \)

4. Andre solved an equation, but when he checked his answer he saw his solution was incorrect. He knows he made a mistake, but he can’t find it. Where is Andre’s mistake and what is the solution to the equation?
5. Choose the equation that has solutions $(5, 7)$ and $(8, 13)$.

A. $3x - y = 8$

B. $y = x + 2$

C. $y - x = 5$

D. $y = 2x - 3$

(from Unit 3, Lesson 12)

6. A length of ribbon is cut into two pieces to use in a craft project. The graph shows the length of the second piece, $x$, for each length of the first piece, $y$. 

-2(3x - 5) = 4(x + 3) + 8  
-6x + 10 = 4x + 12 + 8  
-6x + 10 = 4x + 20  
10 = -2x + 20  
-10 = -2x  
5 = x
a. How long is the ribbon? Explain how you know.

b. What is the slope of the line?

c. Explain what the slope of the line represents and why it fits the story.

(from Unit 3, Lesson 9)
Unit 4, Lesson 5: Solving Any Linear Equation

1. Solve each of these equations. Explain or show your reasoning.

\[2(x + 5) = 3x + 1\]
\[3y - 4 = 6 - 2y\]
\[3(n + 2) = 9(6 - n)\]

2. Clare was solving an equation, but when she checked her answer she saw her solution was incorrect. She knows she made a mistake, but she can't find it. Where is Clare's mistake and what is the solution to the equation?

\[12(5 + 2y) = 4y - (5 - 9y)\]
\[72 + 24y = 4y - 5 - 9y\]
\[72 + 24y = -5y - 5\]
\[24y = -5y - 77\]
\[29y = -77\]
\[y = \frac{-77}{29}\]

3. Solve each equation, and check your solution.

\[\frac{1}{9}(2m - 16) = \frac{1}{3}(2m + 4)\]
\[-4(r + 2) = 4(2 - 2r)\]
\[12(5 + 2y) = 4y - (6 - 9y)\]

4. Here is the graph of a linear equation.
Select **all** true statements about the line and its equation.

A. One solution of the equation is (3, 2).
B. One solution of the equation is (-1, 1).
C. One solution of the equation is \((1, \frac{3}{2})\).
D. There are 2 solutions.
E. There are infinitely many solutions.
F. The equation of the line is \(y = \frac{1}{4}x + \frac{5}{4}\).
G. The equation of the line is \(y = \frac{5}{4}x + \frac{1}{4}\).

(from Unit 3, Lesson 13)

5. A participant in a 21-mile walkathon walks at a steady rate of 3 miles per hour. He thinks, “The relationship between the number of miles left to walk and the number of hours I already walked can be represented by a line with slope -3.” Do you agree with his claim? Explain your reasoning.

(from Unit 3, Lesson 9)
Unit 4, Lesson 6: Strategic Solving

1. Solve each of these equations. Explain or show your reasoning.
   a. \(2b + 8 - 5b + 3 = -13 + 8b - 5\)
   b. \(2x + 7 - 5x + 8 = 3(5 + 6x) - 12x\)
   c. \(2c - 3 = 2(6 - c) + 7c\)

2. Solve each equation and check your solution.
   a. \(-3w - 4 = w + 3\)
   b. \(3(3 - 3x) = 2(x + 3) - 30\)
   c. \(\frac{1}{3}(z + 4) - 6 = \frac{2}{3}(5 - z)\)

3. Elena said the equation \(9x + 15 = 3x + 15\) has no solutions because \(9x\) is greater than \(3x\). Do you agree with Elena? Explain your reasoning.

4. The table gives some sample data for two quantities, \(x\) and \(y\), that are in a proportional relationship.

<table>
<thead>
<tr>
<th>(x)</th>
<th>(y)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>21</td>
</tr>
<tr>
<td>64</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

   a. Complete the table.
   b. Write an equation that represents the relationship between \(x\) and \(y\) shown in the table.
c. Graph the relationship. Use a scale for the axes that shows all the points in the table.

(from Unit 3, Lesson 3)
Unit 4, Lesson 7: All, Some, or No Solutions

1. For each equation, decide if it is always true or never true.

   a. \( x - 13 = x + 1 \)
   b. \( x + \frac{1}{2} = x - \frac{1}{2} \)
   c. \( 2(x + 3) = 5x + 6 - 3x \)
   d. \( x - 3 = 2x - 3 - x \)
   e. \( 3(x - 5) = 2(x - 5) + x \)

2. Mai says that the equation \( 2x + 2 = x + 1 \) has no solution because the left hand side is double the right hand side. Do you agree with Mai? Explain your reasoning.

3. a. Write the other side of this equation so it's true for all values of \( x \): \( \frac{1}{2}(6x - 10) - x = \)

   b. Write the other side of this equation so it's true for no values of \( x \): \( \frac{1}{2}(6x - 10) - x = \)

4. Here is an equation that is true for all values of \( x \): \( 5(x + 2) = 5x + 10 \). Elena saw this equation and says she can tell \( 20(x + 2) + 31 = 4(5x + 10) + 31 \) is also true for any value of \( x \). How can she tell? Explain your reasoning.

5. Elena and Lin are trying to solve \( \frac{1}{2}x + 3 = \frac{7}{2}x + 5 \). Describe the change they each make to each side of the equation.

   a. Elena's first step is to write \( 3 = \frac{7}{2}x - \frac{1}{2}x + 5 \).

   b. Lin's first step is to write \( x + 6 = 7x + 10 \).

   (from Unit 4, Lesson 4)
6. Solve each equation and check your solution.

\[ 3x - 6 = 4(2 - 3x) - 8x \quad \frac{1}{2}z + 6 = \frac{3}{2}(z + 6) \quad 9 - 7w = 8w + 8 \]

(from Unit 4, Lesson 6)

7. The point (-3, 6) is on a line with a slope of 4.

a. Find two more points on the line.

b. Write an equation for the line.

(from Unit 3, Lesson 12)
Unit 4, Lesson 8: How Many Solutions?

1. Lin was looking at the equation $2x - 32 + 4(3x - 2462) = 14x$. She said, “I can tell right away there are no solutions, because on the left side, you will have $2x + 12x$ and a bunch of constants, but you have just $14x$ on the right side.” Do you agree with Lin? Explain your reasoning.

2. Han was looking at the equation $6x - 4 + 2(5x + 2) = 16x$. He said, “I can tell right away there are no solutions, because on the left side, you will have $6x + 10x$ and a bunch of constants, but you have just $16x$ on the right side.” Do you agree with Han? Explain your reasoning.

3. Decide whether each equation is true for all, one, or no values of $x$.
   
   a. $6x - 4 = -4 + 6x$
   
   b. $4x - 6 = 4x + 3$
   
   c. $-2x + 4 = -3x + 4$

4. Solve each of these equations. Explain or show your reasoning.

   a. $3(x - 5) = 6$
   
   b. $2 \left(x - \frac{2}{3}\right) = 0$
   
   c. $4x - 5 = 2 - x$
5. The points (-2, 0) and (0, -6) are each on the graph of a linear equation. Is (2, 6) also on the graph of this linear equation? Explain your reasoning.

6. In the picture triangle \( A'B'C' \) is an image of triangle \( ABC \) after a rotation. The center of rotation is \( E \).

   a. What is the length of side \( AB \)? Explain how you know.

   b. What is the measure of angle \( D' \)? Explain how you know.
Unit 4, Lesson 9: When Are They the Same?

1. Cell phone Plan A costs $70 per month and comes with a free $500 phone. Cell phone Plan B costs $50 per month but does not come with a phone. If you buy the $500 phone and choose Plan B, how many months is it until your cost is the same as Plan A’s?

2. Priya and Han are biking in the same direction on the same path.
   a. Han is riding at a constant speed of 16 miles per hour. Write an expression that shows how many miles Han has gone after $t$ hours.
   b. Priya started riding a half hour before Han. If Han has been riding for $t$ hours, how long has Priya been riding?
   c. Priya is riding at a constant speed of 12 miles per hour. Write an expression that shows how many miles Priya has gone after Han has been riding for $t$ hours.
   d. Use your expressions to find when Han and Priya meet.

3. Which story matches the equation $-6 + 3x = 2 + 4x$?
   A. At 5 p.m., the temperatures recorded at two weather stations in Antarctica are -6 degrees and 2 degrees. The temperature changes at the same constant rate, $x$ degrees per hour, throughout the night at both locations. The temperature at the first station 3 hours after this recording is the same as the temperature at the second station 4 hours after this recording.
   B. Elena and Kiran play a card game. Every time they collect a pair of matching cards, they earn $x$ points. At one point in the game, Kiran has -6 points and Elena has 2 points. After Elena collects 3 pairs and Kiran collects 4 pairs, they have the same number of points.

4. For what value of $x$ do the expressions $\frac{2}{3}x + 2$ and $\frac{4}{3}x - 6$ have the same value?
5. Decide whether each equation is true for all, one, or no values of \( x \).

a. \( 2x + 8 = -3.5x + 19 \)

b. \( 9(x - 2) = 7x + 5 \)

c. \( 3(3x + 2) - 2x = 7x + 6 \)

(from Unit 4, Lesson 8)

6. Solve each equation. Explain your reasoning.

a. \( 3d + 16 = -2(5 - 3d) \)

b. \( 2k - 3(4 - k) = 3k + 4 \)

c. \( \frac{3y-6}{9} = \frac{4-2y}{-3} \)

(from Unit 4, Lesson 6)

7. Describe a rigid transformation that takes Polygon A to Polygon B.

(from Unit 1, Lesson 7)
Unit 4, Lesson 10: On or Off the Line?

1. a. Match the lines $m$ and $n$ to the statements they represent:

   i. A set of points where the coordinates of each point have a sum of 2
   ii. A set of points where the $y$-coordinate of each point is 10 less than its $x$-coordinate

   b. Match the labeled points on the graph to statements about their coordinates:

      i. Two numbers with a sum of 2
      ii. Two numbers where the $y$-coordinate is 10 less than the $x$-coordinate
      iii. Two numbers with a sum of 2 and where the $y$-coordinate is 10 less than the $x$-coordinate

2. Here is an equation: $4x - 4 = 4x + \_\_\_$. What could you write in the blank so the equation would be true for:

   a. No values of $x$
   b. All values of $x$
   c. One value of $x$
3. Mai earns $7 per hour mowing her neighbors' lawns. She also earned $14 for hauling away bags of recyclables for some neighbors.

Priya babysits her neighbor’s children. The table shows the amount of money \( m \) she earns in \( h \) hours. Priya and Mai have agreed to go to the movies the weekend after they have earned the same amount of money for the same number of work hours.

<table>
<thead>
<tr>
<th>( h )</th>
<th>( m )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$8.40</td>
</tr>
<tr>
<td>2</td>
<td>$16.80</td>
</tr>
<tr>
<td>4</td>
<td>$33.60</td>
</tr>
</tbody>
</table>

a. How many hours do they have to work before they go to the movies?

b. How much will they have earned?

c. Explain where the solution can be seen in tables of values, graphs, and equations that represent Priya's and Mai's hourly earnings.

4. For each equation, explain what you could do first to each side of the equation so that there would be no fractions. You do not have to solve the equations (unless you want more practice).

\[
\begin{align*}
\text{a.} & \quad \frac{3x - 4}{8} = \frac{x + 2}{3} \\
\text{b.} & \quad \frac{3(2 - r)}{4} = \frac{3 + r}{6} \\
\text{c.} & \quad \frac{4p + 3}{8} = \frac{p + 2}{4} \\
\text{d.} & \quad \frac{2(a - 7)}{15} = \frac{a + 4}{6}
\end{align*}
\]
Unit 4, Lesson 11: On Both of the Lines

1. Diego has $11 and begins saving $5 each week toward buying a new phone. At the same time that Diego begins saving, Lin has $60 and begins spending $2 per week on supplies for her art class. Is there a week when they have the same amount of money? How much do they have at that time?

2. Use a graph to find $x$ and $y$ values that make both $y = \frac{2}{3}x + 3$ and $y = 2x - 5$ true.

3. The point where the graphs of two equations intersect has $y$-coordinate 2. One equation is $y = -3x + 5$. Find the other equation if its graph has a slope of 1.

4. A farm has chickens and cows. All the cows have 4 legs and all the chickens have 2 legs. All together, there are 82 cow and chicken legs on the farm. Complete the table to show some possible combinations of chickens and cows to get 82 total legs.
Here is a graph that shows possible combinations of chickens and cows that add up to 30 animals:
If the farm has 30 chickens and cows, and there are 82 chicken and cow legs all together, then how many chickens and how many cows could the farm have?

(from Unit 4, Lesson 10)
Unit 4, Lesson 12: Systems of Equations

1. Here is the graph for one equation in a system of equations:

![Graph of a line](image)

a. Write a second equation for the system so it has infinitely many solutions.

b. Write a second equation whose graph goes through (0, 1) so the system has no solutions.

c. Write a second equation whose graph goes through (0, 2) so the system has one solution at (4, 1).

2. Create a second equation so the system has no solutions.

\[
\begin{align*}
y &= \frac{3}{4}x - 4
\end{align*}
\]

3. Andre is in charge of cooking broccoli and zucchini for a large group. He has to spend all $17 he has and can carry 10 pounds of veggies. Zucchini costs $1.50 per pound and broccoli costs $2 per pound. One graph shows combinations of zucchini and broccoli that weigh 10 pounds and the other shows combinations of zucchini and broccoli that cost $17.
a. Name one combination of veggies that weighs 10 pounds but does not cost $17.

b. Name one combination of veggies that costs $17 but does not weigh 10 pounds.

c. How many pounds each of zucchini and broccoli can Andre get so that he spends all $17 and gets 10 pounds of veggies?

(from Unit 4, Lesson 10)

4. The temperature in degrees Fahrenheit, $F$, is related to the temperature in degrees Celsius, $C$, by the equation

$$F = \frac{9}{5}C + 32$$

a. In the Sahara desert, temperatures often reach 50 degrees Celsius. How many degrees Fahrenheit is this?

b. In parts of Alaska, the temperatures can reach -60 degrees Fahrenheit. How many degrees Celsius is this?

c. There is one temperature where the degrees Fahrenheit and degrees Celsius are the same, so that $C = F$. Use the expression from the equation, where $F$ is expressed in terms of $C$, to solve for this temperature.
(from Unit 4, Lesson 9)
Unit 4, Lesson 13: Solving Systems of Equations

1. a. Write equations for the lines shown.

b. Describe how to find the solution to the corresponding system by looking at the graph.

c. Describe how to find the solution to the corresponding system by using the equations.

2. The solution to a system of equations is (5, -19). Choose two equations that might make up the system.

A. \( y = -3x - 6 \)
B. \( y = 2x - 23 \)
C. \( y = -7x + 16 \)
D. \( y = x - 17 \)
E. \( y = -2x - 9 \)
3. Solve the system of equations: \[\begin{cases} y = 4x - 3 \\ y = -2x + 9 \end{cases}\]

4. Solve the system of equations: \[\begin{cases} y = \frac{5}{4}x - 2 \\ y = -\frac{1}{4}x + 19 \end{cases}\]

5. Here is an equation: \[\frac{15(x-3)}{5} = 3(2x - 3)\]
   
   a. Solve the equation by using the distributive property first.

   b. Solve the equation without using the distributive property.

   c. Check your solution.

(from Unit 4, Lesson 6)
Unit 4, Lesson 14: Solving More Systems

1. Solve: \[
\begin{align*}
y &= 6x \\
4x + y &= 7
\end{align*}
\]

2. Solve: \[
\begin{align*}
y &= 3x \\
x &= -2y + 70
\end{align*}
\]

3. Which equation, together with \(y = -1.5x + 3\), makes a system with one solution?
   
   A. \(y = -1.5x + 6\)  
   B. \(y = -1.5x\)  
   C. \(2y = -3x + 6\)  
   D. \(2y + 3x = 6\)  
   E. \(y = -2x + 3\)

4. The system \(x - 6y = 4, 3x - 18y = 4\) has no solution.
   
   a. Change one constant or coefficient to make a new system with one solution.
   
   b. Change one constant or coefficient to make a new system with an infinite number of solutions.

5. Match each graph to its equation.
1. \( y = 2x + 3 \)

2. \( y = -2x + 3 \)

3. \( y = 2x - 3 \)

4. \( y = -2x - 3 \)

(from Unit 3, Lesson 11)

6. Here are two points: (-3, 4), (1, 7). What is the slope of the line between them?

A. \( \frac{4}{3} \)

B. \( \frac{3}{4} \)
C. $\frac{1}{6}$
D. $\frac{2}{3}$

(from Unit 3, Lesson 10)
Unit 4, Lesson 15: Writing Systems of Equations

1. Kiran and his cousin work during the summer for a landscaping company. Kiran's cousin has been working for the company longer, so his pay is 30% more than Kiran's. Last week his cousin worked 27 hours, and Kiran worked 23 hours. Together, they earned $493.85. What is Kiran's hourly pay? Explain or show your reasoning.

2. Decide which story can be represented by the system of equations $y = x + 6$ and $x + y = 100$. Explain your reasoning.
   
   a. Diego's teacher writes a test worth 100 points. There are 6 more multiple choice questions than short answer questions.
   
   b. Lin and her younger cousin measure their heights. They notice that Lin is 6 inches taller, and their heights add up to exactly 100 inches.

3. Clare and Noah play a game in which they earn the same number of points for each goal and lose the same number of points for each penalty. Clare makes 6 goals and 3 penalties, ending the game with 6 points. Noah earns 8 goals and 9 penalties and ends the game with -22 points.

   a. Write a system of equations that describes Clare and Noah's outcomes. Use $x$ to represent the number of points for a goal and $y$ to represent the number of points for a penalty.

   b. Solve the system. What does your solution mean?

4. Solve: \[
\begin{align*}
    y &= 6x - 8 \\
    y &= -3x + 10
\end{align*}
\]

   (from Unit 4, Lesson 14)

5. a. Estimate the coordinates of the point where the two lines meet.
b. Choose two equations that make up the system represented by the graph.

i. \( y = \frac{6}{4}x \)

ii. \( y = 6 - 2.5x \)

iii. \( y = 2.5x + 6 \)

iv. \( y = 6 - 3x \)

v. \( y = 0.8x \)

c. Solve the system of equations and confirm the accuracy of your estimate.

(from Unit 4, Lesson 13)