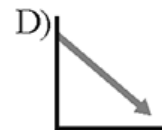
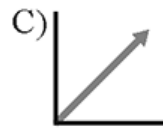
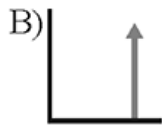
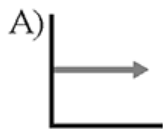


B Quiz #21
Lessons 81–84

1. Find the volume of a cone with a radius of 4 ft and a height of 12 ft. Give your answer in terms of π .
2. Name the pairs of alternate interior angles.
3. Solve. $\frac{m+30}{9} = -3$
4. Fig. X' was formed by a dilation of Fig. X. Determine the scale factor of the dilation by comparing coordinates.
5. $(6.2 \times 10^6)(3.4 \times 10^{-8}) = ?$ Write the product in scientific notation.

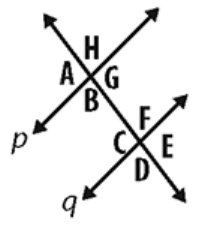
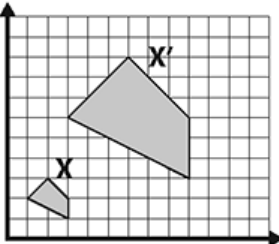
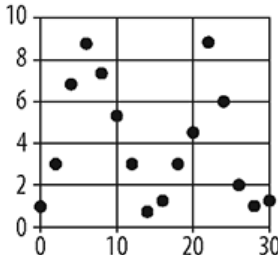
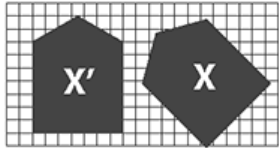
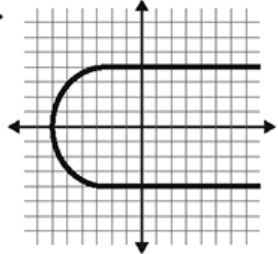
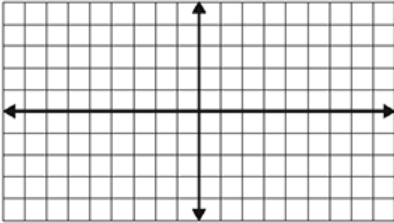
6. The population of a city is 294,104. Express this value using scientific notation. Round to the nearest tenth.
7. In the answer box, describe each slope as either positive, negative, zero, or undefined.



8. Write an equivalent expression without using exponents. 9^{-3}
9. Study the scatter plot. Describe the data in the answer box. Is the data clustered? Can you draw a line of best fit?
10. The shapes are congruent. Describe a transformation of Figure X that results in Figure X'.
11. The vertical line test shows this graph does not represent a function. Why not?
12. Solve the system of equations by graphing.

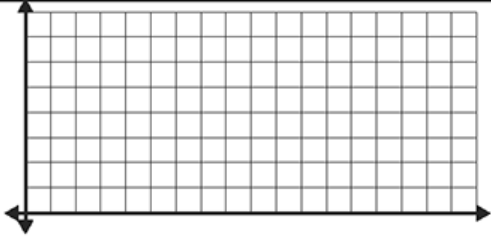
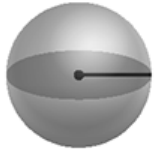
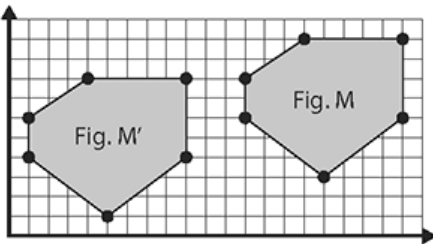
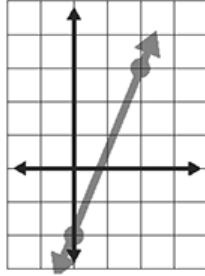
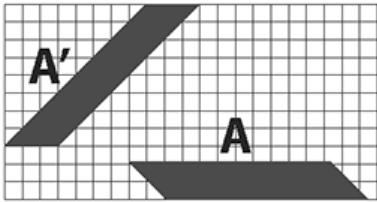
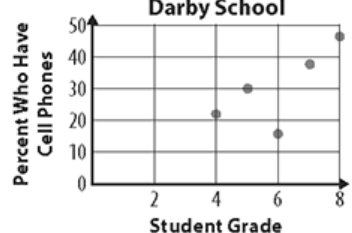
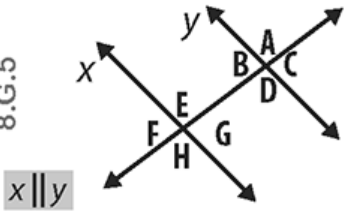
$$y = -x + 4$$

$$y = 2x + 1$$

<p>1.</p> <p>8.G.9</p>	<p>2.</p>  <p>$p \parallel q$</p>
<p>3.</p> <p>8.EE.7</p>	<p>4.</p>  <p>8.G.3</p>
<p>5.</p> <p>8.EE.4</p>	<p>6.</p> <p>8.EE.3</p>
<p>7.</p> <p>8.EE.6</p> <p>A)</p> <p>B)</p> <p>C)</p> <p>D)</p>	<p>8.</p> <p>8.EE.1</p>
<p>9.</p> <p>8.SP.1</p> 	<p>10.</p> <p>8.G.2</p> 
<p>11.</p> <p>8.F.1</p> 	<p>12.</p> <p>8.EE.8</p> 

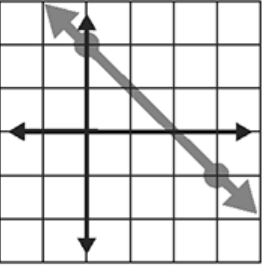
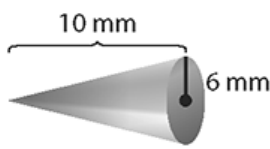
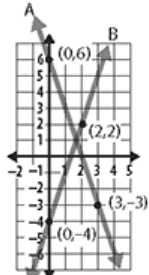
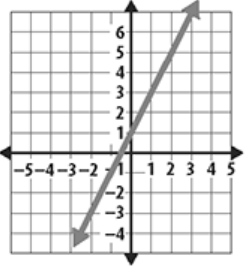
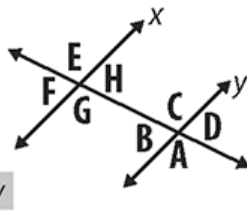
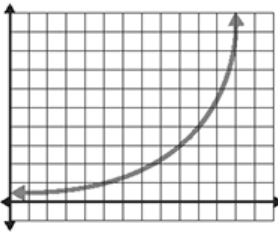
B Quiz #22
Lessons 85–88

1. Solve for c . How many solutions are there? $3(2 + 4c) = 6(3 + 2c)$
2. Sketch a graph that represents a function.
3. Write an equivalent expression without using exponents. $\frac{2^{-3}}{4^{-2}}$
4. Find the volume of the given sphere. Give your answer in terms of π .
5. Fig. M' was formed by a translation of Fig. M. What was the horizontal (x) and vertical (y) change in each?
6. Find the slope.
7. Solve the system of equations by elimination.
$$x - y = 12 \qquad x + y = 22$$
8. Are the shapes congruent? If so, describe a transformation of Figure A that results in Figure A'. If not, explain why.
9. $(2.7 \times 10^5) \times 28,000 = ?$ Write the product in scientific notation.
10. Simplify using exponential notation. $15^3 \times 15^9 = ?$
11. Study the scatter plot and draw the line of best fit. Circle any outliers.
12. Name the pairs of corresponding angles.

<p>1.</p> <p>8.EE.7</p>	<p>2.</p> <p>8.F.1</p> 												
<p>3.</p> <p>8.EE.1</p>	<p>4.</p> <p>8.G.9</p> <p>$r = 9$ in.</p> 												
<p>5.</p> <p>8.G.3</p> 	<p>6.</p> <p>8.EE.6</p> 												
<p>7.</p> <p>8.EE.8</p>	<p>8.</p> <p>8.G.2</p> 												
<p>9.</p> <p>8.EE.4</p>	<p>10.</p> <p>8.EE.1</p>												
<p>11.</p> <p>8.SP.2</p> <p>Cell Phones in Darby School</p>  <table border="1"> <caption>Cell Phones in Darby School</caption> <thead> <tr> <th>Student Grade</th> <th>Percent Who Have Cell Phones</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>22</td> </tr> <tr> <td>5</td> <td>30</td> </tr> <tr> <td>6</td> <td>15</td> </tr> <tr> <td>7</td> <td>38</td> </tr> <tr> <td>8</td> <td>45</td> </tr> </tbody> </table>	Student Grade	Percent Who Have Cell Phones	4	22	5	30	6	15	7	38	8	45	<p>12.</p> <p>8.G.5</p> 
Student Grade	Percent Who Have Cell Phones												
4	22												
5	30												
6	15												
7	38												
8	45												

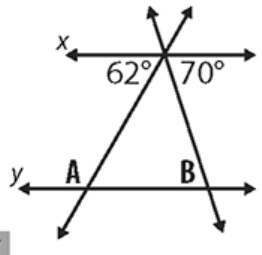
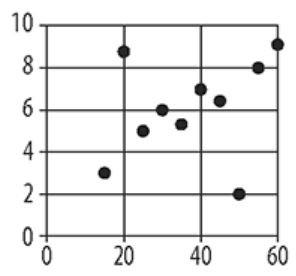
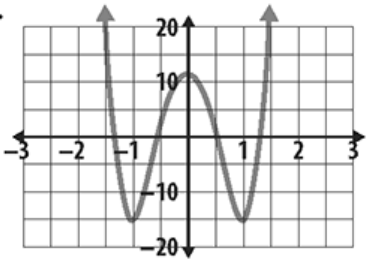
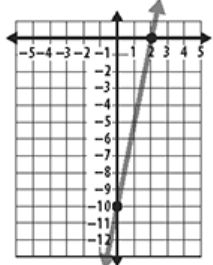
B Quiz #23
Lessons 89–92

1. Find the slope.
2. Study the equation $y = x - 10$. Which variable is the input and which is the output?
3. Solve the system of equations by elimination.
$$2x - 3y = 13 \qquad 8x + 3y = 7$$
4. $(7.8 \times 10^3) - 480 = ?$ Write the difference in scientific notation and in standard form.
5. Find the volume of the given cone. Give your answer in terms of π .
6. Solve. $11a + 45 = 2a$
7. Simplify using exponential notation. $7^4 \times 7^7 \times 7^3$
8. Study the graph of two linear equations. Which line has the smaller slope? Write that slope in the answer box.
9. Study the graph. What is the slope? What is the y -intercept? Write the equation of the line in the form $y = mx + b$.
10. Name the pairs of alternate interior angles.
11. Is this a linear function?
12. Explain why 222.8×10^4 is not written in correct scientific notation. Write the number correctly using scientific notation.

<p>1.</p> <p>8.EE.6</p> 	<p>2.</p> <p>8.F.1</p>
<p>3.</p> <p>8.EE.8</p>	<p>4.</p> <p>8.EE.4</p>
<p>5.</p> <p>8.G.9</p> 	<p>6.</p> <p>8.EE.7</p>
<p>7.</p> <p>8.EE.1</p>	<p>8.</p> <p>8.F.2</p> 
<p>9.</p> <p>8.F.4</p> 	<p>10.</p> <p>8.G.5</p>  <p>$x \parallel y$</p>
<p>11.</p> <p>8.F.3</p> 	<p>12.</p> <p>8.EE.3</p>

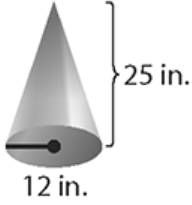
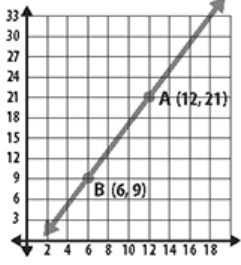
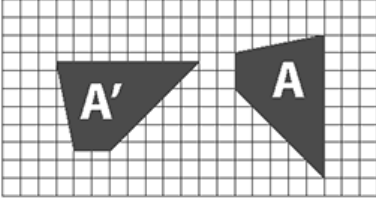
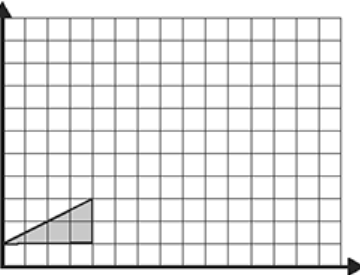
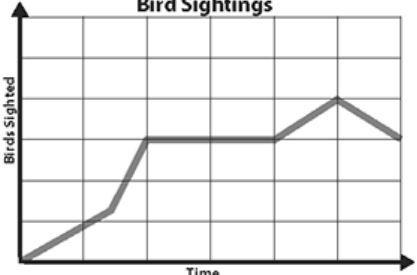
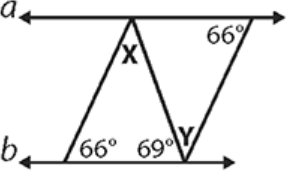
B Quiz #24
Lessons 93–96

1. Find the volume of a cylinder with a radius of 5.2 cm and a height of 4.5 cm. Give your answer in terms of π .
2. Solve. $5b + 25 = 75$
3. Find $m\angle A$ and $m\angle B$.
4. $-\sqrt{\frac{49}{100}} = ?$
5. Simplify using exponential form. $k^4(k^5)$
6. Study the graph in the answer box. Is the data clustered? Circle any outliers.
7. $(8.1 \times 10^6) \times (4.2 \times 10^4) = ?$ Write the product in scientific notation.
8. Solve the system of equations by substitution.
 $y = x + 2$ $y = -2x + 3$
9. (4, 6) and (12, 10) are on the same line. What is the slope of the line? What is the y -intercept? Write the equation for the line.
10. How many times larger is 4.3×10^{-2} than 4.3×10^{-6} ?
11. At what two values of x does the function begin to increase?
12. Compare the graph with the algebraic equation. Which has the greater slope?

<p>1.</p> <p>8.G.9</p>	<p>2.</p> <p>8.EE.7</p>
<p>3.</p> <p>8.G.5</p>  <p>$x \parallel y$</p>	<p>4.</p> <p>8.EE.2</p>
<p>5.</p> <p>8.EE.1</p>	<p>6.</p> <p>8.SP.1</p> 
<p>7.</p> <p>8.EE.4</p>	<p>8.</p> <p>8.EE.8</p>
<p>9.</p> <p>8.F.4</p>	<p>10.</p> <p>8.EE.3</p>
<p>11.</p> <p>8.F.5</p> 	<p>12.</p> <p>8.F.2</p>  <p>$y = 3x + 6$</p>

B Quiz #25
Lessons 97–100

1. Find the volume of the given cone. Use 3.14 as the value of pi.
2. Solve the system of equations by substitution.
$$x + 5 = y \qquad x + y = 1$$
3. Find the slope of the given line.
4. The two shapes are congruent. Describe a transformation of Figure A that results in Figure A'.
5. Dilate the figure by a scale factor of 3. Draw the new figure and label the coordinates.
6. Give the equation for the line with a y -intercept of 3 that passes through points (2, 2) and (4, 1).
7. An ornithologist is tracking bird sightings. Match the appropriate section on the graph to each description below.
 - A) the period with the greatest increase in bird sightings
 - B) a time when bird sightings were constant
 - C) a period of time when bird sightings were decreasing
8. $(2.5 \times 10^{-3}) \times (3.3 \times 10^{-1}) = ?$ Write the product in scientific notation.
9. Simplify using exponential form. $\frac{8^{24}}{8^4}$
10. Find $m\angle X$ and $m\angle Y$.
11. Solve for b . How many solutions are there? $b - 0.7 = b + 4.3$
12. Both the table and the equation are linear functions. Compare their slopes. Which is greater? Remember that $y = mx + b$ and $m = \frac{y_2 - y_1}{x_2 - x_1}$.

<p>1.</p> <p>8.G.9</p> 	<p>2.</p> <p>8.EE.8</p>										
<p>3.</p> <p>8.EE.5</p> 	<p>4.</p> <p>8.G.2</p> 										
<p>5.</p> <p>8.G.3</p> 	<p>6.</p> <p>8.EE.6</p>										
<p>7.</p> <p>8.F.5</p> <p>Bird Sightings</p> 	<p>8.</p> <p>8.EE.4</p>										
<p>9.</p> <p>8.EE.1</p>	<p>10.</p> <p>8.G.5</p>  <p>$a \parallel b$</p>										
<p>11.</p> <p>8.EE.7</p>	<p>12.</p> <p>8.F.2</p> <table border="1" data-bbox="898 1707 1125 1896"> <thead> <tr> <th>x</th> <th>y</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>6</td> </tr> <tr> <td>3</td> <td>8</td> </tr> <tr> <td>4</td> <td>10</td> </tr> <tr> <td>5</td> <td>12</td> </tr> </tbody> </table> <p>$y = 3x + 9$</p>	x	y	2	6	3	8	4	10	5	12
x	y										
2	6										
3	8										
4	10										
5	12										

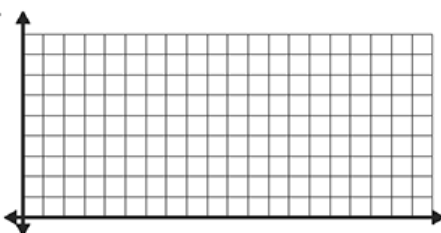
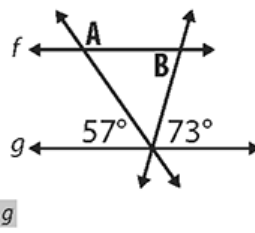
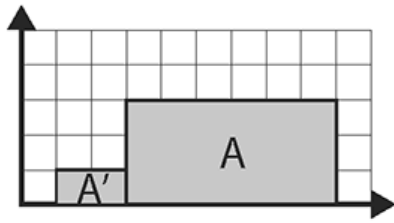
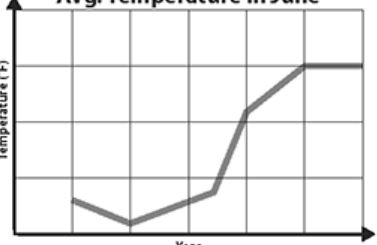
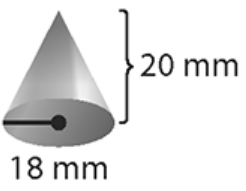
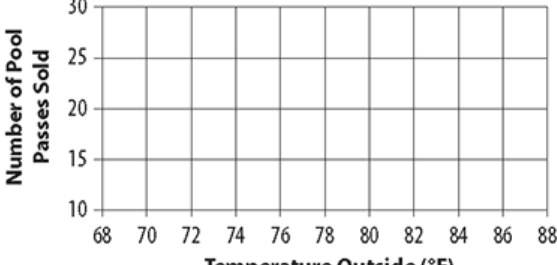
B Quiz #26
Lessons 101–104

<i>x</i>	<i>y</i>
0	8
1	6
2	4
3	2

- Graph the data points shown in the table and find the slope.
- Solve. $t + 5 = 3t - 7$
- In 1750, the population of New York City was about 2.7×10^4 . Write this number in standard form.
- Solve the system of equations by elimination.

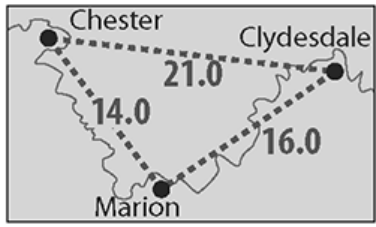
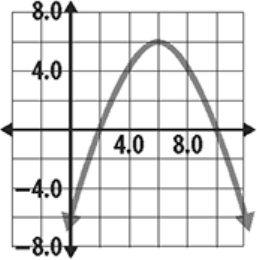
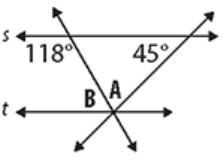
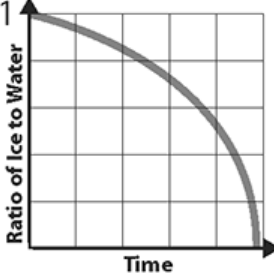
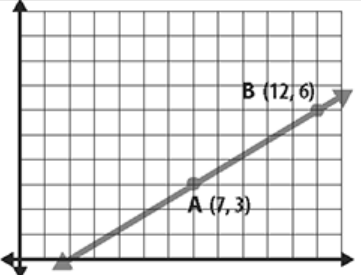

$$x + y = 19 \qquad 10x - 7y = 20$$
- Simplify using exponential form. $\frac{12^8}{12}$
- Find $m\angle A$ and $m\angle B$.
- A triangle has side lengths of 6, 14, and 16. Is it a right triangle or not?
- Fig. A' was formed by a dilation of Fig. A. Determine the scale factor of the dilation by comparing side lengths.
- A scientist is tracking the average high temperature for the month of June in his region. Match each description below to the appropriate place on the graph.
 - a period when the temperature is decreasing
 - a period when the temperature remains constant
 - the period when the temperature is increasing most quickly
- Find the volume of the given cone. Use 3.14 as the value of pi.
- $(4.5 \times 10^3) \times (2.2 \times 10^6) = ?$ Write the product in scientific notation.
- Use the table to construct a scatter plot.

Temperature outside	68	72	76	80	84	88
Number of pool passes sold	10	18	14	22	26	30

<p>1.</p>  <p>8.EE.5</p>	<p>2.</p> <p>8.EE.7</p>
<p>3.</p> <p>8.EE.3</p>	<p>4.</p> <p>8.EE.8</p>
<p>5.</p> <p>8.EE.1</p>	<p>6.</p>  <p>8.G.5</p> <p>$f \parallel g$</p>
<p>7.</p> <p>8.G.6</p>	<p>8.</p>  <p>8.G.3</p>
<p>9.</p> <p>Avg. Temperature in June</p>  <p>8.F.5</p>	<p>10.</p>  <p>8.G.9</p> <p>18 mm</p> <p>20 mm</p>
<p>11.</p> <p>8.EE.4</p>	<p>12.</p>  <p>8.SP.1</p> <p>Number of Pool Passes Sold</p> <p>Temperature Outside (°F)</p>

B Quiz #27
Lessons 105–108

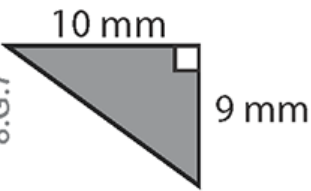
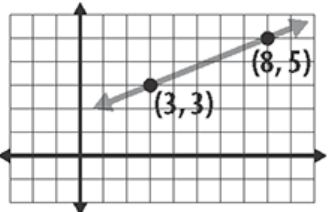
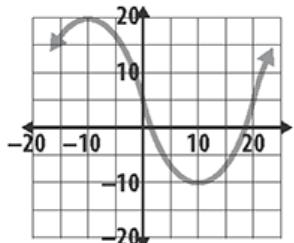
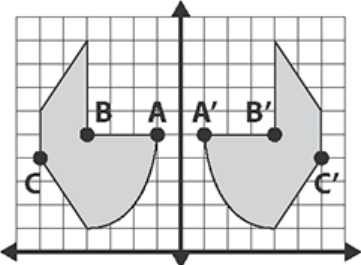
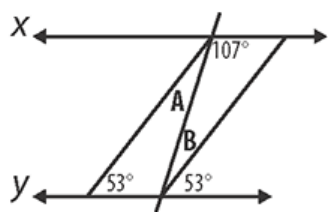
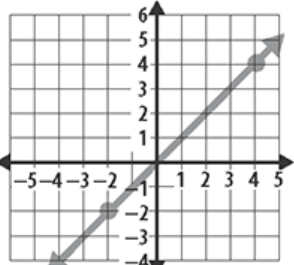
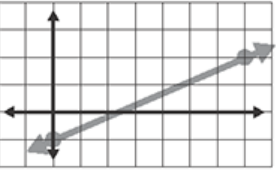
- $\sqrt[3]{\frac{512}{64}} = ?$
- Chester, Marion, and Clydesdale sit along the Viejo River. Use the distances on the map to decide if the routes between the towns represent a right triangle.
- Simplify. Express in standard form. $\frac{(5^2)^8}{(5^8)(5^7)}$
- $\frac{1.32 \times 10^5}{3.3 \times 10^2} = ?$ Write the quotient in scientific notation and in standard form.
- At what value of x does the function begin to decrease?
- Solve the system of equations by substitution.
 $y = -8 + x$ $6x + y = 13$
- Solve. $-8 + 2d = 6d$
- How many times larger is 6×10^5 than 4×10^3 ?
- Find $m\angle A$ and $m\angle B$.
- A large block of ice is melting in a glass. The graph illustrates the relationship between time (x) and the ratio of ice to water in the glass (y). Over time, the ratio of ice to water A) _____. The graph is B) _____.
- Find the slope of the given line.
- Find the volume of the given cylinder. Give your answer in terms of π .

<p>1.</p> <p>8.EE.2</p>	<p>2.</p> 
<p>3.</p> <p>8.EE.1</p>	<p>4.</p> <p>8.EE.4</p>
<p>5.</p>  <p>8.F.5</p>	<p>6.</p> <p>8.EE.8</p>
<p>7.</p> <p>8.EE.7</p>	<p>8.</p> <p>8.EE.3</p>
<p>9.</p>  <p>8.G.5</p> <p>$s \parallel t$</p>	<p>10.1</p>  <p>8.F.5</p> <p>A)</p> <p>B) linear / nonlinear</p>
<p>11.</p>  <p>8.EE.5</p>	<p>12.</p>  <p>8.G.9</p>

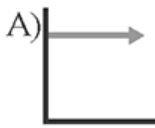
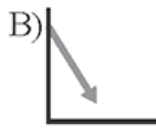
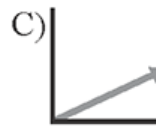
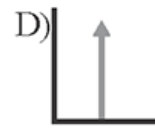
<p>1.</p> <p>8.EE.7</p>	<p>2.</p> <p>8.EE.4</p>				
<p>3.</p> <p>8.EE.1</p>	<p>4.</p> <p>8.F.2</p>				
<p>5.</p> <p>8.EE.6</p>	<p>6.</p> <p>8.EE.8</p>				
<p>7.</p> <p>8.G.7</p>	<p>8.</p> <p>8.F.4</p>				
<p>9.</p> <p>8.G.9</p>	<p>10.</p> <p>8.G.5</p> <p>$s \parallel t$</p>				
<p>11.</p> <p>8.F.3</p> <table border="1" data-bbox="292 1680 592 1911"> <thead> <tr> <th>Linear</th> <th>Nonlinear</th> </tr> </thead> <tbody> <tr> <td style="height: 80px;"></td> <td style="height: 80px;"></td> </tr> </tbody> </table>	Linear	Nonlinear			<p>12.</p> <p>8.EE.2</p>
Linear	Nonlinear				

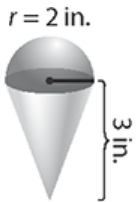
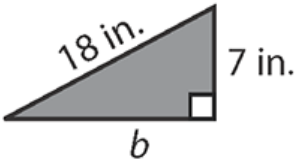
B Quiz #29
Lessons 113–116

1. Solve the system of equations by elimination. $x + 5y = -4$ $3x - y = 4$
2. Use the Pythagorean Theorem to find the length of the missing side. Round the answer to the nearest tenth.
3. Use the Pythagorean Theorem to find the distance between these points. How long is the horizontal leg? How long is the vertical leg? What is the length of the hypotenuse? Round to the nearest tenth.
4. $3.41 \times 10^5 + 56,000 = ?$ Write the sum in scientific notation.
5. Solve. $2(8 + 3x) - 3x = 7$
6. The tables describe two linear functions. Which function has the greater y -intercept?
7. Is there a value of x at which the function begins to decrease? If so, what is the value?
8. The shape is reflected across the y -axis. Give the coordinates of points A' , B' , and C' . How do they relate to points A , B , and C ?
9. Simplify using only positive exponents. $\frac{1}{a^{-5}}$
10. Show that the two triangles are similar by finding the measures of the two missing angles.
11. Study the graph. What is the slope? What is the y -intercept? Write the equation of the line in the form $y = mx + b$.
12. Find the slope and y -intercept, then write the slope-intercept equation for the line.

<p>1.</p> <p>8.EE.8</p>	<p>2.</p> <p>8.G.7</p> 																				
<p>3.</p> <p>8.G.8</p> 	<p>4.</p> <p>8.EE.4</p>																				
<p>5.</p> <p>8.EE.7</p>	<p>6.</p> <p>8.F.2</p> <table border="1" data-bbox="868 829 1120 1018"> <thead> <tr> <th>x</th> <th>y</th> </tr> </thead> <tbody> <tr> <td>-3</td> <td>8</td> </tr> <tr> <td>-2</td> <td>3</td> </tr> <tr> <td>-1</td> <td>-2</td> </tr> <tr> <td>0</td> <td>-7</td> </tr> </tbody> </table> <table border="1" data-bbox="1144 829 1404 1018"> <thead> <tr> <th>x</th> <th>y</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>4</td> </tr> <tr> <td>7</td> <td>11</td> </tr> <tr> <td>14</td> <td>18</td> </tr> <tr> <td>21</td> <td>25</td> </tr> </tbody> </table>	x	y	-3	8	-2	3	-1	-2	0	-7	x	y	0	4	7	11	14	18	21	25
x	y																				
-3	8																				
-2	3																				
-1	-2																				
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x	y																				
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7	11																				
14	18																				
21	25																				
<p>7.</p> <p>8.F.5</p> 	<p>8.</p> <p>8.G.3</p> 																				
<p>9.</p> <p>8.EE.1</p>	<p>10.</p> <p>8.G.5</p>  <p>$x \parallel y$</p>																				
<p>11.</p> <p>8.F.4</p> 	<p>12.</p> <p>8.EE.6</p> 																				

B Quiz #30
Lessons 117–120

- $(3.45 \times 10^{-3})(1.25 \times 10^{-2}) = ?$ Write the product in scientific notation.
- Solve the system of equations by substitution. $x = 3$ $y = -3x + 2$
- Use the Pythagorean Theorem to find the distance between $(-5, 2)$ and $(10, 10)$.
- Is $0.\overline{83}$ rational or irrational? How do you know?
- $(6, -4)$ and $(-6, 4)$ are on the same line. What is the slope of the line? What is the y -intercept? Write the equation for the line.
- The equation and table are linear functions. Determine which slope is greater.
- The snow cone is composed of a cone and a half-sphere. Find the total volume of the snow cone. Give your answer in terms of π .
- Solve: $8a - 3 = 2a + 15$
- Does this table represent a linear function?
- In the answer box, describe each slope as either positive, negative, zero, or undefined.
A)  B)  C)  D) 
- $-\sqrt{\frac{49}{144}}$
- Use the Pythagorean Theorem to find the missing side length. Round the answer to the nearest tenth.

1. 8.EE.4	2.												
3. 8.G.8	4. 8.NS.1												
5. 8.F.4	6. 8.F.2 $y = 3x + 1$ <table border="1" data-bbox="1117 804 1369 989"> <thead> <tr> <th>x</th> <th>y</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>8</td> </tr> <tr> <td>6</td> <td>16</td> </tr> <tr> <td>9</td> <td>24</td> </tr> <tr> <td>12</td> <td>32</td> </tr> </tbody> </table>	x	y	3	8	6	16	9	24	12	32		
x	y												
3	8												
6	16												
9	24												
12	32												
7. 8.G.9 	8. 8.EE.7												
9. 8.F.3 <table border="1" data-bbox="256 1402 589 1625"> <thead> <tr> <th>x</th> <th>y</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>17</td> </tr> <tr> <td>3</td> <td>24</td> </tr> <tr> <td>4</td> <td>30</td> </tr> <tr> <td>5</td> <td>37</td> </tr> <tr> <td>6</td> <td>45</td> </tr> </tbody> </table>	x	y	2	17	3	24	4	30	5	37	6	45	10. 8.EE.6 A) B) C) D)
x	y												
2	17												
3	24												
4	30												
5	37												
6	45												
11. 8.EE.2	12. 8.G.7 												

B Quiz #31

Lessons 121–124

- Use the Pythagorean Theorem to find the distance between the two points. Round to the nearest hundredth.
- Solve for x . $2(4x - 3) = 2(4x - 1)$ How many solutions are there?
- In the answer box, arrange the following equations according to whether they are linear or nonlinear.
 A) $y = (x)^2$ C) $y = -\frac{2}{5}x + 5$ E) $y = (\frac{8}{3})2x$ G) $y = 2x^6$
 B) $y = 4x - 10$ D) $y = x + 9$ F) $y = -x^2 + 0.5$ H) $y = 2x + 2$

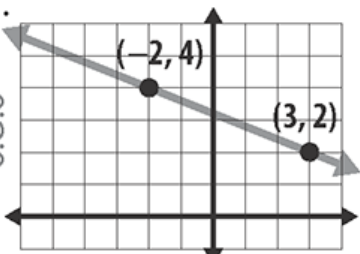
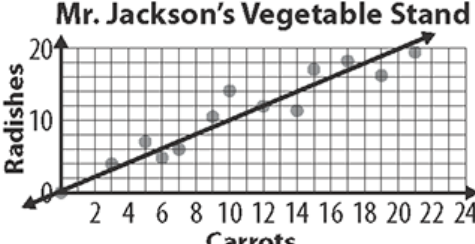
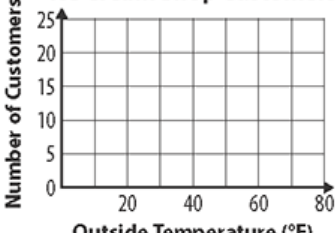
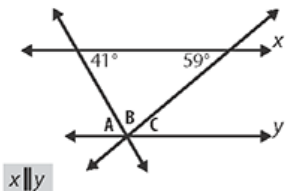
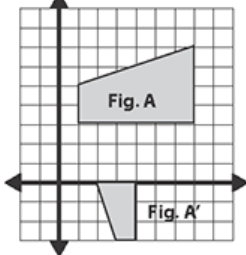
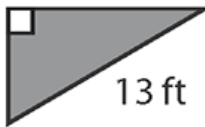
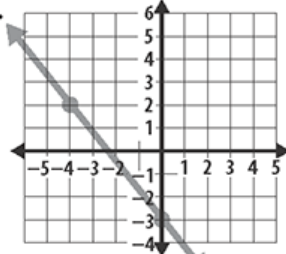
- The scatter plot shows the relationship between the number of carrots and radishes sold at Mr. Jackson's Vegetable Stand. The equation of the line of best fit is $y = x$. According to the line of best fit, if 17 carrots were sold, how many radishes should have been sold? How many radishes did he actually sell?

- $\frac{3.65 \times 10^{-5}}{2.5 \times 10^{-2}} = ?$ Write the quotient in scientific notation and in standard form.

- Use the data table to create a scatter plot. Include the line of best fit. Do the data points lie close to the line? If so, are there any outliers?

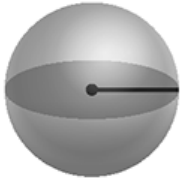
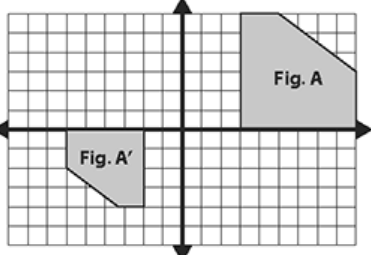
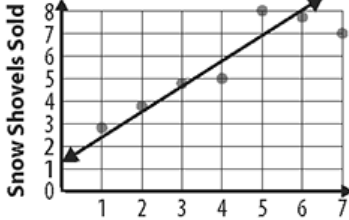
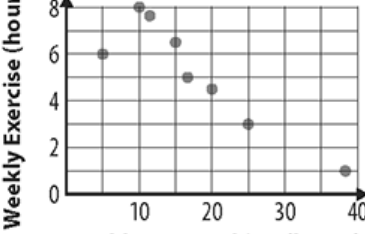
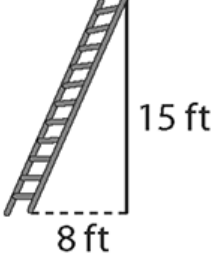
Outside Temperature	53	60	61	65	70	75	80
Ice Cream Shop Customers	1	3	25	10	12	15	20

- Find the measures of angles A , B , and C .
- Solve the system using any method. $3x - y = 22$ $5x + 3y = 60$
- Determine whether the shapes are similar. If not, write *not similar*. If they are, describe the transformations that occurred.
- Use the Pythagorean Theorem to find the missing side length. Round the answer to the nearest tenth.
- Study the graph. What is the slope? What is the y -intercept? Write the equation of the line in the form $y = mx + b$.
- Which equation has the smaller y -intercept? Write the smaller y -intercept in the answer box.

<p>1.</p> <p>8.G.8</p> 	<p>2.</p> <p>8.EE.7</p>				
<p>3.</p> <p>8.F.3</p> <table border="1" data-bbox="219 514 519 745"> <thead> <tr> <th>Linear</th> <th>Nonlinear</th> </tr> </thead> <tbody> <tr> <td style="height: 80px;"></td> <td style="height: 80px;"></td> </tr> </tbody> </table>	Linear	Nonlinear			<p>4.</p> <p>8.SP.3</p> <p>Mr. Jackson's Vegetable Stand</p> 
Linear	Nonlinear				
<p>5.</p> <p>8.EE.4</p>	<p>6.</p> <p>8.SP.2</p> <p>Ice Cream Shop Customers</p> 				
<p>7.</p> <p>8.G.5</p> 	<p>8.</p> <p>8.EE.8</p>				
<p>9.</p> <p>8.G.4</p> 	<p>10.</p> <p>8.G.7</p> 				
<p>11.</p> <p>8.F.4</p> 	<p>12.</p> <p>8.F.2</p> <p>A) $y = 2x + 6$</p> <p>B) $y = x + 2$</p>				

B Quiz #32
Lessons 125–128

1. Give the equation for the line with a slope of $\frac{2}{3}$ and a y -intercept of 1.
2. Solve the system using any method. $3x + y = 7$ $x - y = 5$
3. Solve. $6b - 8 - 5b - 5 = 27$
4. The tables describe two linear functions. Which function has the greater slope?
5. Find the volume of the given sphere. Give your answer in terms of π . Round to the nearest tenth.
6. Determine whether the shapes are similar. If not, write *not similar*. If they are, describe one possible set of transformations that may have occurred.
7. $(4.31 \times 10^{-4}) - (1.25 \times 10^{-5}) = ?$ Write the difference in scientific notation and in standard form.
8. The scatter plot shows the relationship between snowfall and shovel sales. The equation of the line of best fit is $y = x + 1.8$. According to the line of best fit, how many shovels should sell on a day with 3 inches of snow? Make sure your answer makes sense.
9. Study the plot and draw a line of best fit. Which is the best prediction of exercise time for a person who watches 30 hours of TV?
10. Simplify by using positive exponents. $4ab^{-5}$
11. A ladder leans up against the wall. The bottom of the ladder is eight feet away from the wall, and the top of the ladder is fifteen feet up the wall. Find the length of the ladder.
12. Use the Pythagorean Theorem to find the distance between $(-2, -2)$ and $(3, 4)$. Round to the nearest hundredth.

<p>1.</p> <p>8.EE.6</p>	<p>2.</p> <p>8.EE.8</p>																				
<p>3.</p> <p>8.EE.7</p>	<p>4.</p> <p>8.F.2</p> <table border="1" data-bbox="878 531 1382 716"> <thead> <tr> <th>x</th> <th>y</th> <th>x</th> <th>y</th> </tr> </thead> <tbody> <tr> <td>-2</td> <td>1</td> <td>1</td> <td>2</td> </tr> <tr> <td>-1</td> <td>4.5</td> <td>2</td> <td>4</td> </tr> <tr> <td>0</td> <td>8</td> <td>3</td> <td>6</td> </tr> <tr> <td>1</td> <td>11.5</td> <td>4</td> <td>8</td> </tr> </tbody> </table>	x	y	x	y	-2	1	1	2	-1	4.5	2	4	0	8	3	6	1	11.5	4	8
x	y	x	y																		
-2	1	1	2																		
-1	4.5	2	4																		
0	8	3	6																		
1	11.5	4	8																		
<p>5.</p> <p>8.G.9</p> <p>$r = 21$ in.</p> 	<p>6.</p> <p>8.G.4</p> 																				
<p>7.</p> <p>8.EE.4</p>	<p>8.</p> <p>8.SP.3</p> <p>Shovel Sales</p> 																				
<p>9.</p> <p>8.SP.2</p> <p>TV and Exercise</p>  <p>A) 12 hours B) 2.5 hours C) 5.2 hours</p>	<p>10.</p> <p>8.EE.1</p>																				
<p>11.</p> <p>8.G.7</p> 	<p>12.</p> <p>8.G.8</p>																				

B Quiz #33

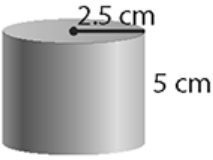
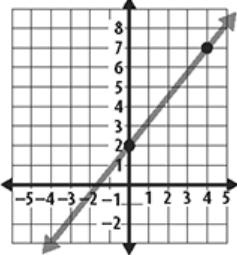
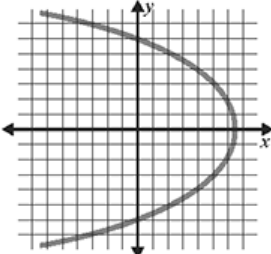
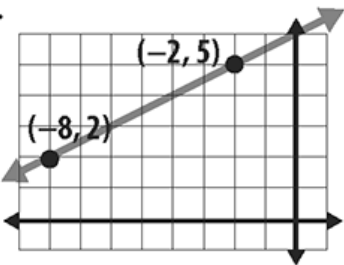
Lessons 129–132

- Give the equation for the line with a y -intercept of -2 which passes through points $(3, 5)$ and $(4, 8)$.
- Find the volume of the given cylinder. Use 3.14 as the value of π .
- The graph and the table describe two linear functions. Which has the smaller slope?
- Cleveland State University has approximately 1.68×10^4 students. The Ohio State University has approximately 6.4×10^4 students. How many times more students attend OSU than CSU?
- Solve for x . $2(7x - 3) = 3x + 8 + 2x + 4$ How many solutions are there?
- The after-school program had 6 activity stations set up.
 - What is the relative frequency of girls who chose jump rope to the total number of kids?
 - What is the relative frequency of boys who chose the nature walk to the total number of kids who chose the nature walk?

	Jump Rope	Basketball	Hula Hoop	Nature Walk	Blocks	Races	Total
Boys	1	6	4	3	3	7	24
Girls	7	5	5	3	2	8	30
Total	8	11	9	6	5	15	54

- The equation $d = 68h + 360$ shows the distance a car travels where d is the total distance in miles and h is the time in hours.
 - How fast is the car moving?
 - This amount is represented by the _____.
- The vertical line test shows this graph does not represent a function. Explain why it does not.
- Arrange the following equations in the answer box according to whether they are linear or nonlinear.

A) $y = (x)^5$	C) $y = 9x^6$	E) $y = -3x^2 + 1.5$	G) $y = 4x^4 - 5$
B) $y = 8x + 1$	D) $y = (\frac{9}{5})^2x$	F) $y = -\frac{10}{7}x + 2$	H) $y = x + 2$
- Simplify. $(x^3y^4)(x^4) = ?$
- Use the Pythagorean Theorem to find the distance between the two points. Round to the nearest hundredth.
- Solve the system using any method. $y = 2$ $x - 3y = 9$

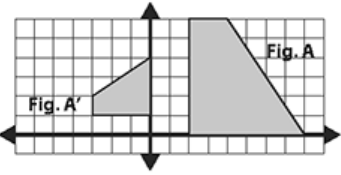
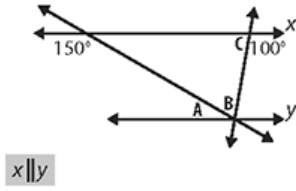
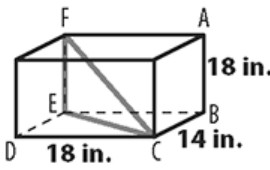
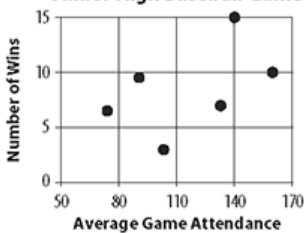
<p>1.</p> <p style="text-align: right;">8.EE.6</p>	<p>2.</p> <p style="text-align: right;">8.G.9</p> 										
<p>3.</p> <p style="text-align: right;">8.F.2</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 2px 10px;">x</th> <th style="padding: 2px 10px;">y</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px 10px;">-2</td> <td style="padding: 2px 10px;">-6</td> </tr> <tr> <td style="padding: 2px 10px;">-1</td> <td style="padding: 2px 10px;">0</td> </tr> <tr> <td style="padding: 2px 10px;">0</td> <td style="padding: 2px 10px;">6</td> </tr> <tr> <td style="padding: 2px 10px;">1</td> <td style="padding: 2px 10px;">12</td> </tr> </tbody> </table> 	x	y	-2	-6	-1	0	0	6	1	12	<p>4.</p> <p style="text-align: right;">8.EE.4</p>
x	y										
-2	-6										
-1	0										
0	6										
1	12										
<p>5.</p> <p style="text-align: right;">8.EE.7</p>	<p>6.</p> <p style="text-align: right;">8.SP.4</p> <p style="margin-left: 40px;">A)</p> <p style="margin-left: 40px;">B)</p>										
<p>7.</p> <p style="text-align: right;">8.F.4</p> <p style="margin-left: 40px;">A)</p> <p style="margin-left: 40px;">B)</p>	<p>8.</p> <p style="text-align: right;">8.F.1</p> 										
<p>9.</p> <p style="text-align: right;">8.F.3</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 2px 10px;">Linear</th> <th style="padding: 2px 10px;">Nonlinear</th> </tr> </thead> <tbody> <tr> <td style="height: 80px;"></td> <td style="height: 80px;"></td> </tr> </tbody> </table>	Linear	Nonlinear			<p>10.</p> <p style="text-align: right;">8.EE.1</p>						
Linear	Nonlinear										
<p>11.</p> <p style="text-align: right;">8.G.8</p> 	<p>12.</p> <p style="text-align: right;">8.EE.8</p>										

B Quiz #34
Lessons 133–136

- Find the value of two numbers if their sum is 14 and their difference is 2.
- Find the slope of a line with coordinates (2, 6) and (4, 9).
- Determine whether the shapes are similar. If not, write *not similar*. If they are, describe one possible set of transformations that may have occurred.
- Solve. $2(2x - 4) = -16$
- The tables describe two linear functions. Which function has the larger y -intercept?
- Find the measures of angles A , B , and C .
- (6, 15) and (15, 21) are on the same line. What is the slope of the line? What is the y -intercept? Write the equation for the line.
- Deshawn polled a random sample of middle schoolers to see which grade had the highest relative frequency of bus riders. Fill in the relative frequencies. Which grade had the highest? Which grade's relative frequency was closest to that of all three grades?

	Sixth	Seventh	Eighth	Total
Bus Riders	37	27	23	87
Non-Bus Riders	13	23	27	63
Total	50	50	50	150
Relative Frequency of Bus Riders	A)	B)	C)	D)

- Find the volume of a cylinder with a radius of 4 inches and a height of 12 inches. Give your answer in terms of π .
- Simplify using exponential notation. $(6d^8)^3$
- Find the length of diagonal \overline{FC} and round to the nearest tenth.
- Describe the data displayed in the scatter plot. Is the data clustered? If so, is the data linear? Is there a positive association, a negative association, or no association?

<p>1.</p> <p>8.EE.8</p>	<p>2.</p> <p>8.EE.6</p>																				
<p>3.</p> <p>8.G.4</p> 	<p>4.</p> <p>8.EE.7</p>																				
<p>5.</p> <p>8.F.2</p> <table border="1" data-bbox="256 829 490 1012"> <thead> <tr> <th>x</th> <th>y</th> </tr> </thead> <tbody> <tr> <td>-2</td> <td>-1</td> </tr> <tr> <td>-1</td> <td>3</td> </tr> <tr> <td>0</td> <td>7</td> </tr> <tr> <td>1</td> <td>11</td> </tr> </tbody> </table> <table border="1" data-bbox="519 829 753 1012"> <thead> <tr> <th>x</th> <th>y</th> </tr> </thead> <tbody> <tr> <td>-5</td> <td>2</td> </tr> <tr> <td>0</td> <td>5</td> </tr> <tr> <td>5</td> <td>8</td> </tr> <tr> <td>10</td> <td>11</td> </tr> </tbody> </table>	x	y	-2	-1	-1	3	0	7	1	11	x	y	-5	2	0	5	5	8	10	11	<p>6.</p> <p>8.G.5</p> 
x	y																				
-2	-1																				
-1	3																				
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1	11																				
x	y																				
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10	11																				
<p>7.</p> <p>8.F.4</p>	<p>8.</p> <p>8.SP.4</p> <p>A)</p> <p>B)</p> <p>C)</p> <p>D)</p> <p>Highest:</p> <p>Closest:</p>																				
<p>9.</p> <p>8.G.9</p>	<p>10.</p> <p>8.EE.1</p>																				
<p>11.</p> <p>8.G.7</p> 	<p>12.</p> <p>8.SP.1</p> <p>Junior High Baseball Game</p> 																				

B Quiz #35

Lessons 137–140

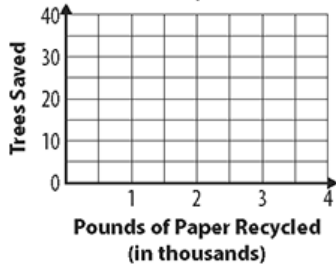
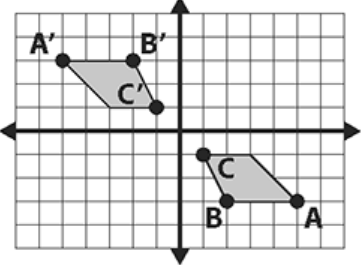
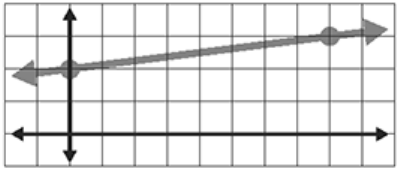
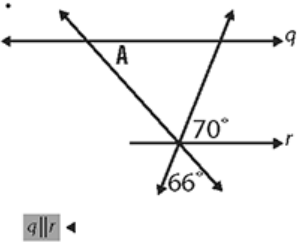
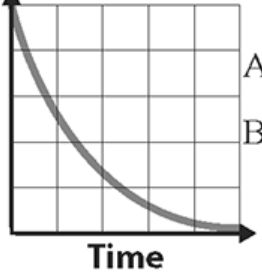
- Simplify using exponential notation. $(4^7) \times (4^2)^5$
- Use the data table to create a scatter plot. Include the line of best fit. Do the data points lie close to the line? If so, are there any outliers?

Paper Recycled (lb)	0.5	1	1.5	2	2.5	3	3.5
Trees Saved	3	8	13	17	22	27	32

- Solve for c . $2(4c + 2) = 6c + 12 + 2c$ How many solutions are there?
- Clara got a job at the movie theater. On the first day, she sold 4 tickets to the evening show and 8 matinee tickets, for a total of \$36 in ticket sales. On the second day, she sold 5 tickets to the evening show and 4 matinee tickets, for a total of \$33 in ticket sales. What is the price for each show? Use the variable x to represent the cost of the evening show and y to represent the cost of a matinee ticket.
- The equation $d = 60h + 20$ shows the distance a car travels where d is the total distance in miles and h is the time in hours.
 - How far has the car already traveled?
 - This amount is represented by the _____ on the graph.
- The equation and the table both describe linear functions. Compare their slopes. Which is larger?
- $(3.15 \times 10^7) + (2.5 \times 10^5) = ?$ Write the sum in scientific notation.
- The shape is rotated 180° about the origin. Give the coordinates of point A' , B' , and C' . How do they compare to points A , B , and C ?
- Find the slope and y -intercept, then write the slope-intercept equation for the line.
- Sophia polled her schoolmates to find out how they get to school.
 - What is the relative frequency of seventh-grade walkers to total walkers?
 - What is the relative frequency of bus riders to total students? Simplify your answers.

	take the bus	walk to school	driven by parent	total
seventh graders	83	44	23	150
eighth graders	74	62	14	150
total	157	106	37	300

- Find $m\angle A$.
- A chemist is studying the decay of a radioactive element. The graph illustrates the relationship he finds between time (x) and mass (y). As time moves forward, mass A) _____. The graph is B) _____.

<p>1.</p> <p style="text-align: right;">8.EE.1</p>	<p>2.</p> <p style="text-align: center;">Recycle</p>  <p style="text-align: right;">8.SP.2</p>										
<p>3.</p> <p style="text-align: right;">8.EE.7</p>	<p>4.</p> <p style="text-align: right;">8.EE.8</p>										
<p>5.</p> <p style="text-align: right;">8.F.4</p> <p>A)</p> <p>B)</p>	<p>6.</p> <p style="text-align: right;">8.F.2</p> <p>$y = -2.5x$</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #cccccc;"> <th style="padding: 2px 5px;">x</th> <th style="padding: 2px 5px;">y</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px 5px;">-2</td> <td style="padding: 2px 5px;">-3.6</td> </tr> <tr> <td style="padding: 2px 5px;">-1</td> <td style="padding: 2px 5px;">-1.8</td> </tr> <tr> <td style="padding: 2px 5px;">0</td> <td style="padding: 2px 5px;">0</td> </tr> <tr> <td style="padding: 2px 5px;">1</td> <td style="padding: 2px 5px;">1.8</td> </tr> </tbody> </table>	x	y	-2	-3.6	-1	-1.8	0	0	1	1.8
x	y										
-2	-3.6										
-1	-1.8										
0	0										
1	1.8										
<p>7.</p> <p style="text-align: right;">8.EE.4</p>	<p>8.</p> <p style="text-align: right;">8.G.3</p> 										
<p>9.</p> <p style="text-align: right;">8.EE.6</p> 	<p>10.</p> <p style="text-align: right;">8.SP.4</p> <p>A)</p> <p>B)</p>										
<p>11.</p> <p style="text-align: right;">8.G.5</p>  <p style="margin-left: 20px;">$q \parallel r$</p>	<p>12.</p> <p style="text-align: right;">8.F.5</p>  <p style="text-align: right;">A)</p> <p style="text-align: right;">B) linear / nonlinear</p>										