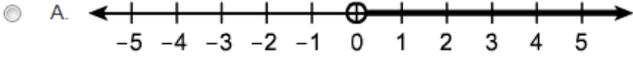
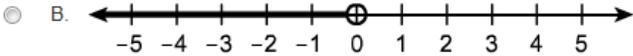
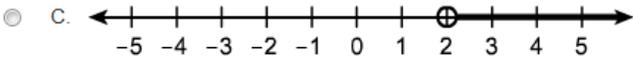
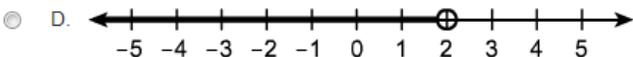
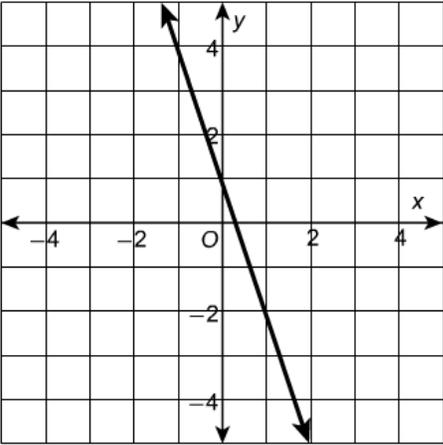
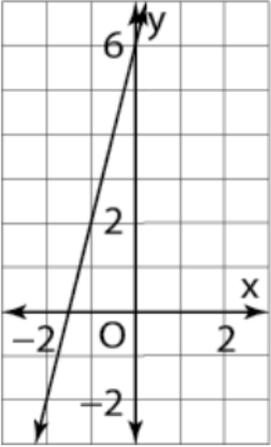


# FCPS Algebra 1 Common Assessment 1

Question Number	Question
1	<p>Which of the sets shown include the elements of Set Z that are both even numbers and multiples of 3?</p> $Z = \{-12, -10, -9, -1, 3, 6, 8, 15\}$ <p><input type="radio"/> A. {6}</p> <p><input type="radio"/> B. {-12, 6}</p> <p><input type="radio"/> C. {-12, -9, 3, 6, 15}</p> <p><input type="radio"/> D. {-12, -10, -9, -1, 3, 6, 8, 15}</p>
2	<p>Order the numbers from least to greatest.</p> <p><input type="text" value="3.3"/> <input type="text" value="22/7"/> <input type="text" value="sqrt(11)"/> <input type="text" value="sqrt(32/3)"/></p>
3	<p>What is the value of <math>x</math> in this equation?</p> $3x + 8 - 2(1 - x) = 1$ <p><input type="radio"/> A. -9</p> <p><input type="radio"/> B. -6</p> <p><input type="radio"/> C. -5</p> <p><input type="radio"/> D. -1</p>
4	<p>The sum of three consecutive integers is 84. What are the three numbers?</p> <p>number 1: <input type="text"/></p> <p>number 2: <input type="text"/></p> <p>number 3: <input type="text"/></p>
5	<p>How many solutions are there to this equation?</p> $4x - 6 + 3(2 - x) = 2x - (x - 4)$ <p><input type="radio"/> A. no solution</p> <p><input type="radio"/> B. exactly one solution</p> <p><input type="radio"/> C. at least two solutions</p> <p><input type="radio"/> D. infinitely many solutions</p>

6	<p>Solve the equation <math>d = gh - f</math> for <math>h</math>.</p> <p><input type="radio"/> A. <math>h = \frac{d - f}{g}</math></p> <p><input type="radio"/> B. <math>h = \frac{d}{g} + f</math></p> <p><input type="radio"/> C. <math>h = \frac{d + f}{g}</math></p> <p><input type="radio"/> D. <math>h = \frac{d}{g} - f</math></p>
7	<p>Solve the inequality.</p> $8(x - 2) + 9 < 3(x - 1) + 5x$ <p><input type="radio"/> A. <math>x &lt; -7</math></p> <p><input type="radio"/> B. <math>x &lt; -3</math></p> <p><input type="radio"/> C. no solution</p> <p><input type="radio"/> D. all real numbers</p>
8	<p>Graph the solution of the inequality on a number line.</p> $3(x - 2) - (1 - x) > 2x - 7$ <p><input type="radio"/> A. </p> <p><input type="radio"/> B. </p> <p><input type="radio"/> C. </p> <p><input type="radio"/> D. </p>
9	<p>Solve the compound inequality.</p> $3 - 2x \geq 5 \text{ or } 3(x - 2) + 1 > 7$ <p><input type="radio"/> A. <math>x \leq -4</math> or <math>x &lt; 1</math></p> <p><input type="radio"/> B. <math>x \geq -4</math> or <math>x &lt; 1</math></p> <p><input type="radio"/> C. <math>x \leq -1</math> or <math>x &gt; 4</math></p> <p><input type="radio"/> D. <math>x \geq -1</math> or <math>x &gt; 4</math></p>

10	<p>Which equation matches the graph?</p>  <p> <input type="radio"/> A. <math>y = -3x + 1</math>  <input type="radio"/> B. <math>y = -3x - 1</math>  <input type="radio"/> C. <math>y = -2x + 1</math>  <input type="radio"/> D. <math>y = -2x - 1</math> </p>
11	<p>What is the equation of the line through <math>(-2, -2)</math> and <math>(4, -5)</math>?</p> <p> <input type="radio"/> A. <math>y = \frac{1}{2}x - 1</math>  <input type="radio"/> B. <math>y = -\frac{1}{2}x - 3</math>  <input type="radio"/> C. <math>y = 2x + 2</math>  <input type="radio"/> D. <math>y = -2x - 6</math> </p>
12	<p>Fatima is saving up to buy a \$300 bike. She saves \$25 each week from her babysitting money. Which linear equation represents the amount Fatima still has to save after <math>x</math> weeks?</p> <p> <input type="radio"/> A. <math>y = 25x + 300</math>  <input type="radio"/> B. <math>y = 25x - 300</math>  <input type="radio"/> C. <math>y = -25x - 300</math>  <input type="radio"/> D. <math>y = -25x + 300</math> </p>
13	<p>Complete the equation for the horizontal line that passes through <math>(11, 4)</math>.</p> <p><math>y = \boxed{\phantom{000}}</math></p>
14	<p>Which equation matches the graph?</p>  <p> <input type="radio"/> A. <math>y - 2 = 4(x + 1)</math>  <input type="radio"/> B. <math>y - 1 = 4(x + 2)</math>  <input type="radio"/> C. <math>y + 2 = -4(x + 1)</math>  <input type="radio"/> D. <math>y + 1 = -4(x + 2)</math> </p>

15	<p>What is an equation in point-slope form of the line that passes through the point (8, 5) and has slope <math>-7</math>?</p> <p><input type="radio"/> A. <math>y + 5 = 7(x + 8)</math></p> <p><input type="radio"/> B. <math>y + 5 = -7(x + 8)</math></p> <p><input type="radio"/> C. <math>y - 5 = 7(x - 8)</math></p> <p><input type="radio"/> D. <math>y - 5 = -7(x - 8)</math></p>															
16	<p>What is an equation in point-slope form of the line that passes through (1, <math>-6</math>) and (4, 6)?</p> <p><input type="radio"/> A. <math>y + 1 = 4(x - 6)</math></p> <p><input type="radio"/> B. <math>y - 1 = 4(x + 6)</math></p> <p><input type="radio"/> C. <math>y + 6 = 4(x - 1)</math></p> <p><input type="radio"/> D. <math>y - 6 = 4(x + 1)</math></p>															
17	<p>Identify the <math>x</math>-intercept and the <math>y</math>-intercept of the graph of <math>6x + 15y = -30</math>.</p> <p><input type="radio"/> A. <math>x</math>-intercept: 2; <math>y</math>-intercept: 5</p> <p><input type="radio"/> B. <math>x</math>-intercept: <math>-2</math>; <math>y</math>-intercept: <math>-5</math></p> <p><input type="radio"/> C. <math>x</math>-intercept: 5; <math>y</math>-intercept: 2</p> <p><input type="radio"/> D. <math>x</math>-intercept: <math>-5</math>; <math>y</math>-intercept: <math>-2</math></p>															
18	<p>Luke sells pins for \$4 each and rings for \$6 each. Complete the equation which determines the number of pins <math>x</math> and the number of rings <math>y</math> he must sell to make \$40.</p> <p>Choose... <math>x</math> + Choose... <math>y</math> = Choose...</p> <table border="1" data-bbox="235 1207 1063 1375"> <thead> <tr> <th>Choose...</th> <th>Choose...</th> <th>Choose...</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>1</td> <td>10</td> </tr> <tr> <td>1</td> <td>6</td> <td>40</td> </tr> <tr> <td>2</td> <td>4</td> <td>24</td> </tr> <tr> <td>6</td> <td>2</td> <td>2</td> </tr> </tbody> </table>	Choose...	Choose...	Choose...	4	1	10	1	6	40	2	4	24	6	2	2
Choose...	Choose...	Choose...														
4	1	10														
1	6	40														
2	4	24														
6	2	2														
19	<p>Which equation is the slope-intercept form of the line that passes through (1, 2) and is parallel to the graph of <math>y = \frac{8}{3}x</math>?</p> <p><input type="radio"/> A. <math>y = \frac{8}{3}x - 2</math></p> <p><input type="radio"/> B. <math>y = \frac{8}{3}x - \frac{2}{3}</math></p> <p><input type="radio"/> C. <math>y = \frac{8}{3}x - \frac{3}{2}</math></p> <p><input type="radio"/> D. <math>y = \frac{8}{3}x + 2</math></p>															
20	<p>What is the <math>y</math>-intercept of the line <math>y + 8 = -4(x - 4.5)</math>?</p> <p><math>y</math>-intercept = <input type="text"/></p>															