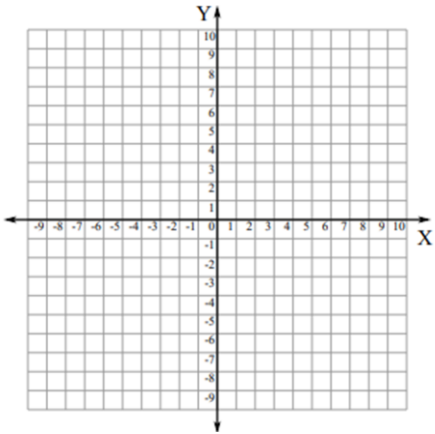


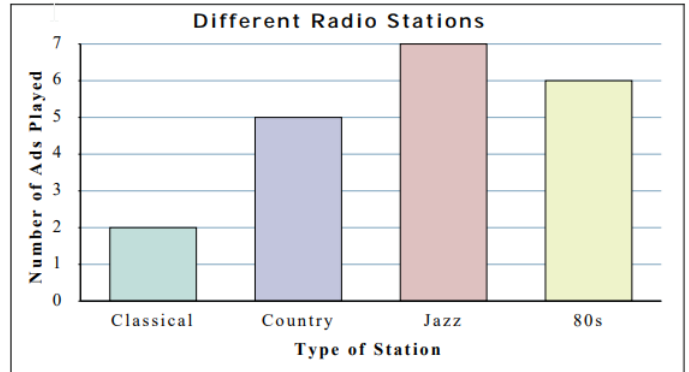
## Math Tier 2 Practice Test

1. Complete the table for each linear equation and then plot the points to graph the line.  
 $y = -2x + 1$

x	$y = -2x + 1$	y	(x, y)
1			
2			
-1			

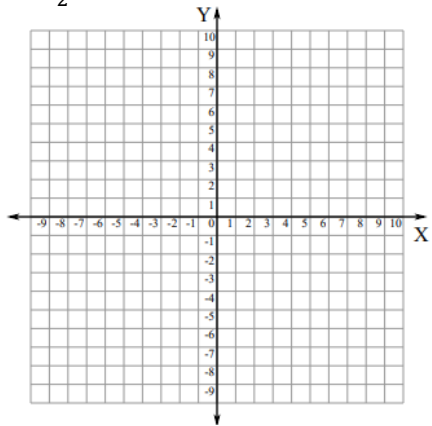


2. Use the bar graph to answer the questions



- How many ads were on the Jazz station?
- Which station had the most ads?
- How many more ads did the Country station have than the Classical station?
- Which station had exactly 5 ads?

3. Find three solutions to the equation and then graph  
 $y = \frac{1}{2}x - 1$



4. A rectangular garden has one side with a length of  $x+2$  and another with a length  $2x+7$ . Find the perimeter of the garden.

5. Write in scientific notation: 265,000,000,000

6. Add

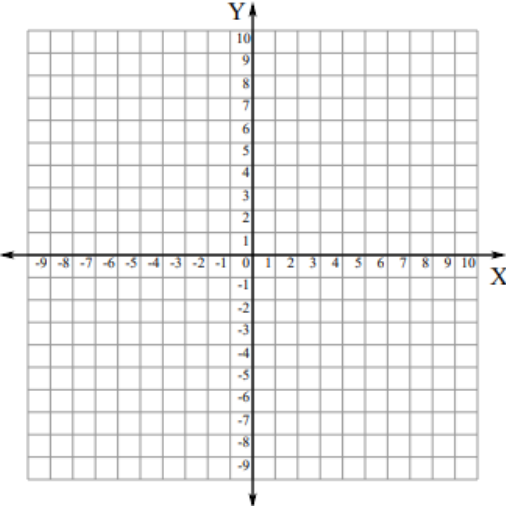
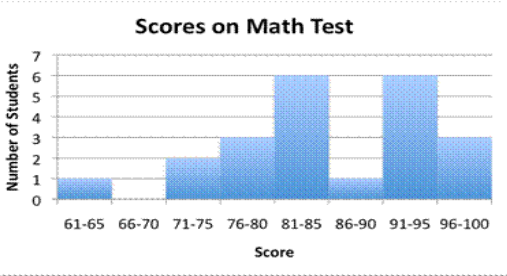
$$(3x+2y-7z)+(9x-y+12z)$$

7. Subtract

$$(13x + 5y - 7z) - (12x - y - 7z)$$

8.  $2x^3$  if  $x = -3$

<p>9. Find the <math>x</math>- intercept and the <math>y</math>-intercept for the equation.</p> $3x - 2y = 6$	<p>10. Evaluate</p> $(2^{-2})(3^{-1})$
<p>11. Simplify by combining like terms</p> $-8xy^2 + 3xy^2 - xy$	<p>12. Multiply</p> $(2x+5)(3x-7)$
<p>13. Is <math>(1, -4)</math> a solution for <math>x - y = 4</math>?</p>	<p>14. Simplify by combining like terms</p> $8ab - 6b + a - 8ba - 3b + 6ab$
<p>15. Find the mode: 18, 12, 23, 15, 32, 61, 12</p>	<p>16. Solve the absolute value equation</p> $ y+3  = 5$
<p>17. Write the equation of the line <i>slope = -4 and <math>y</math> - intercept <math>(0, -3)</math></i></p>	<p>18. Solve the absolute value inequality</p> $ x  < 2$
<p>19. Find the median: 18, 12, 23, 15, 32, 61, 12</p>	<p>20. A game requires rolling a six-sided die. What is the probability of rolling a 1?</p>
<p>21. Solve the absolute value inequality</p> $ x+3  > 5$	<p>22. Solve the absolute value equation</p> $ 2x  + 5 = 7$
<p>23. Find the mean and round to the nearest hundredth: 18, 12, 23, 15, 32, 61, 12</p>	<p>24. A game requires rolling a six-sided die. What is the probability of rolling an even number?</p>

<p>25. Find the slope</p> $2y = 3x + 10$	<p>26. Solve the absolute value inequality</p> $4 2y + 6  - 9 < 27$
<p>27. Orvis bought a new sound system for \$2,760 using the store's finance plan. He will pay \$115 a month for 24 months. Write an equation Orvis could use to find out how much money he still owes after each month of the plan.</p>	<p>28. Determine the number of outcomes for the event</p> <p>You go to the snack bar to buy a bagel and a drink for lunch. You can choose from a plain bagel, a blueberry bagel, or a raisin bagel. The choices for drink include water or a sports drink.</p>
<p>29. Mary rolls a six-sided die, numbered 1 to 6. Find the probability of rolling a number greater than 2.</p>	<p>30. John received the following scores on her history exams: Find the mean (round to the nearest hundredth), median, and mode.</p> $86, 93, 78, 96, 82, 96, 72$
<p>31. Find the slope of a line perpendicular to</p> $y = -2x - 6$	<p>32. Write the equation of the line perpendicular to <math>y = 3</math> that contains <math>(-2, -4)</math></p>
<p>33. Are the following lines parallel, perpendicular, or neither?</p> $x - y = -6 \text{ and } x + y = 3 + 2$	<p>34. Joe flips a two-sided coin. What is the probability the coin lands on heads?</p>
<p>35. Graph the inequality <math>y \geq -3x</math></p> 	<p>36. Use the graph to answer the questions</p>  <ol style="list-style-type: none"> <li>How many students scored in the 71-75 range?</li> <li>How many more students scored in the 91-95 range than in the 71-75 range?</li> <li>If a B is given for any score from 81 to 90, how many students made B's?</li> </ol>