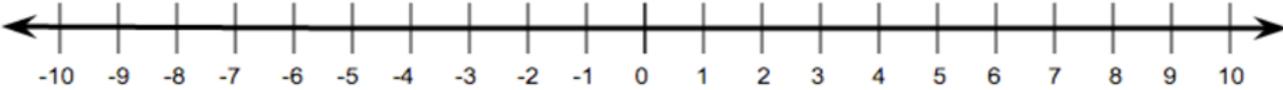




General Problem Solving Strategies	Order of Operations																																																																																																																																																																																																									
<ul style="list-style-type: none"> <li>• Reread question for clarity</li> <li>• Draw a picture</li> <li>• Make a table</li> <li>• Circle or highlight key terms</li> <li>• Calculate and solve</li> <li>• See if my answer makes sense</li> <li>• Circle my answer</li> </ul>	<p><b>PEMDAS</b></p> <ol style="list-style-type: none"> <li>1. Parentheses (brackets, etc.)</li> <li>2. Exponents</li> <li>3. Multiplication or Division (left to right)</li> <li>4. Addition or Subtraction (left to right)</li> </ol>																																																																																																																																																																																																									
Symbols	Divisibility Rules																																																																																																																																																																																																									
<p>&gt; is greater than            &lt; is less than            = is equal to             x  = absolute value of x</p>	<table border="1"> <tr> <td>2</td> <td>If the last digit is even</td> </tr> <tr> <td>3</td> <td>If the sum of the digits can be divided by 3</td> </tr> <tr> <td>5</td> <td>If the last digit is 0 or 5</td> </tr> <tr> <td>6</td> <td>If the number is divisible by both 2 and 3</td> </tr> <tr> <td>9</td> <td>If the sum of the digits can be divided by 9</td> </tr> <tr> <td>10</td> <td>If the last digit is 0</td> </tr> </table>		2	If the last digit is even	3	If the sum of the digits can be divided by 3	5	If the last digit is 0 or 5	6	If the number is divisible by both 2 and 3	9	If the sum of the digits can be divided by 9	10	If the last digit is 0																																																																																																																																																																																												
2	If the last digit is even																																																																																																																																																																																																									
3	If the sum of the digits can be divided by 3																																																																																																																																																																																																									
5	If the last digit is 0 or 5																																																																																																																																																																																																									
6	If the number is divisible by both 2 and 3																																																																																																																																																																																																									
9	If the sum of the digits can be divided by 9																																																																																																																																																																																																									
10	If the last digit is 0																																																																																																																																																																																																									
Hundreds Charts																																																																																																																																																																																																										
<table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td></tr> <tr><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td></tr> <tr><td>31</td><td>32</td><td>33</td><td>34</td><td>35</td><td>36</td><td>37</td><td>38</td><td>39</td><td>40</td></tr> <tr><td>41</td><td>42</td><td>43</td><td>44</td><td>45</td><td>46</td><td>47</td><td>48</td><td>49</td><td>50</td></tr> <tr><td>51</td><td>52</td><td>53</td><td>54</td><td>55</td><td>56</td><td>57</td><td>58</td><td>59</td><td>60</td></tr> <tr><td>61</td><td>62</td><td>63</td><td>64</td><td>65</td><td>66</td><td>67</td><td>68</td><td>69</td><td>70</td></tr> <tr><td>71</td><td>72</td><td>73</td><td>74</td><td>75</td><td>76</td><td>77</td><td>78</td><td>79</td><td>80</td></tr> <tr><td>81</td><td>82</td><td>83</td><td>84</td><td>85</td><td>86</td><td>87</td><td>88</td><td>89</td><td>90</td></tr> <tr><td>91</td><td>92</td><td>93</td><td>94</td><td>95</td><td>96</td><td>97</td><td>98</td><td>99</td><td>100</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	<table border="1"> <tr><td>91</td><td>92</td><td>93</td><td>94</td><td>95</td><td>96</td><td>97</td><td>98</td><td>99</td><td>100</td></tr> <tr><td>81</td><td>82</td><td>83</td><td>84</td><td>85</td><td>86</td><td>87</td><td>88</td><td>89</td><td>90</td></tr> <tr><td>71</td><td>72</td><td>73</td><td>74</td><td>75</td><td>76</td><td>77</td><td>78</td><td>79</td><td>80</td></tr> <tr><td>61</td><td>62</td><td>63</td><td>64</td><td>65</td><td>66</td><td>67</td><td>68</td><td>69</td><td>70</td></tr> <tr><td>51</td><td>52</td><td>53</td><td>54</td><td>55</td><td>56</td><td>57</td><td>58</td><td>59</td><td>60</td></tr> <tr><td>41</td><td>42</td><td>43</td><td>44</td><td>45</td><td>46</td><td>47</td><td>48</td><td>49</td><td>50</td></tr> <tr><td>31</td><td>32</td><td>33</td><td>34</td><td>35</td><td>36</td><td>37</td><td>38</td><td>39</td><td>40</td></tr> <tr><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td></tr> <tr><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td></tr> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr> </table>		91	92	93	94	95	96	97	98	99	100	81	82	83	84	85	86	87	88	89	90	71	72	73	74	75	76	77	78	79	80	61	62	63	64	65	66	67	68	69	70	51	52	53	54	55	56	57	58	59	60	41	42	43	44	45	46	47	48	49	50	31	32	33	34	35	36	37	38	39	40	21	22	23	24	25	26	27	28	29	30	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10																																																																																																																																																																																																	
11	12	13	14	15	16	17	18	19	20																																																																																																																																																																																																	
21	22	23	24	25	26	27	28	29	30																																																																																																																																																																																																	
31	32	33	34	35	36	37	38	39	40																																																																																																																																																																																																	
41	42	43	44	45	46	47	48	49	50																																																																																																																																																																																																	
51	52	53	54	55	56	57	58	59	60																																																																																																																																																																																																	
61	62	63	64	65	66	67	68	69	70																																																																																																																																																																																																	
71	72	73	74	75	76	77	78	79	80																																																																																																																																																																																																	
81	82	83	84	85	86	87	88	89	90																																																																																																																																																																																																	
91	92	93	94	95	96	97	98	99	100																																																																																																																																																																																																	
91	92	93	94	95	96	97	98	99	100																																																																																																																																																																																																	
81	82	83	84	85	86	87	88	89	90																																																																																																																																																																																																	
71	72	73	74	75	76	77	78	79	80																																																																																																																																																																																																	
61	62	63	64	65	66	67	68	69	70																																																																																																																																																																																																	
51	52	53	54	55	56	57	58	59	60																																																																																																																																																																																																	
41	42	43	44	45	46	47	48	49	50																																																																																																																																																																																																	
31	32	33	34	35	36	37	38	39	40																																																																																																																																																																																																	
21	22	23	24	25	26	27	28	29	30																																																																																																																																																																																																	
11	12	13	14	15	16	17	18	19	20																																																																																																																																																																																																	
1	2	3	4	5	6	7	8	9	10																																																																																																																																																																																																	
Number Line																																																																																																																																																																																																										
 <p>A horizontal number line with arrows at both ends. It is marked with integers from -10 to 10. Tick marks are placed at every integer, and the corresponding number is written below each tick mark.</p>																																																																																																																																																																																																										

\*Only for students who have this special access accommodation in their IEP: *Calculators or other mathematics tools: non-calculator section*. Information may be **removed** from this reference sheet; *nothing may be added*. Teachers **may not** complete the multiplication table; only the student may fill in information they need.



Place Value								
Whole Numbers						Decimals		
Hundred-thousands	Ten-thousands	Thousands	Hundreds	Tens	Ones	.	Tenths	Hundredths
Geometric Measurement					Percentages and Proportions			
Perimeter = <i>distance around</i> $P = \text{perimeter}; l = \text{length}; w = \text{width}$ <u>Perimeter of Rectangle:</u> $P = 2l + 2w$					<ul style="list-style-type: none"> <li><math>\frac{\text{is}}{\text{of}} = \frac{\%}{100}</math></li> <li><math>x\% = \frac{x}{100}</math></li> <li>if <math>\frac{a}{b} = \frac{c}{d}</math>, then <math>ad = bc</math></li> </ul>			
Statistics					Coordinate Plane			
<ul style="list-style-type: none"> <li>me<u>A</u>n-Average</li> <li><u>M</u>ode-Most Often</li> <li>me<u>D</u>ian-Middle</li> <li><u>R</u>ang<u>E</u>-Least to Greatest</li> </ul>								
Properties					Fractions			
<ul style="list-style-type: none"> <li><math>a(b + c) = ab + ac</math></li> <li><math>a + (b + c) = (a + b) + c</math></li> <li><math>a \cdot (b \cdot c) = (a \cdot b) \cdot c</math></li> <li><math>a \cdot b = b \cdot a</math></li> <li><math>a + b = b + a</math></li> </ul>					<ul style="list-style-type: none"> <li><math>\frac{a}{b} + \frac{c}{d} = \frac{ad+bc}{bd}</math></li> <li><math>\frac{a}{b} - \frac{c}{d} = \frac{ad-bc}{bd}</math></li> <li><math>\frac{a}{b} \cdot \frac{c}{d} = \frac{ac}{bd}</math></li> <li><math>\frac{a}{b} \div \frac{c}{d} = \frac{ad}{bc}</math></li> </ul>			

\*Only for students who have this special access accommodation in their IEP: *Calculators or other mathematics tools: non-calculator section*. Information may be **removed** from this reference sheet; *nothing may be added*. Teachers **may not** complete the multiplication table; only the student may fill in information they need.



**Multiplication Table (DO NOT complete this table for the student.)**

X	1	2	3	4	5	6	7	8	9	10	11	12
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

**\*Only** for students who have this special access accommodation in their IEP: *Calculators or other mathematics tools: non-calculator section*. Information may be **removed** from this reference sheet; *nothing may be added*. Teachers **may not** complete the multiplication table; only the student may fill in information they need.