



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>										<b>PEMDAS</b> <ul 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></ul>																																																																																																													
Symbols										Divisibility Rules																																																																																																													
<p><math>&gt;</math> is greater than</p> <p><math>&lt;</math> is less than</p> <p><math>=</math> is equal to</p> <p><math> x </math> = absolute value</p> <p><math>\leq</math> is less than or equal to</p> <p><math>\geq</math> is greater than or equal to</p>										<table><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 Chart										Coordinate Plane																																																																																																													
<table><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										
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																																																																																																														
Number Line																																																																																																																							

*\*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
Probability					Percentages and Proportions			
$P = \frac{\text{favorable outcomes}}{\text{possible outcomes}}$					<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>			
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> <li><math>a - (-b) = a + b</math></li> <li><math>a + (-b) = a - b</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>			
Statistics					Geometry and Measurement Abbreviations			
<ul style="list-style-type: none"> <li>me<u>A</u>n-Average</li> <li><u>MO</u>de-Most Often</li> <li>me<u>D</u>ian-Middle</li> <li><u>RangE</u>-Least to Greatest</li> </ul>					<ul style="list-style-type: none"> <li><math>l</math> = length</li> <li><math>w</math> = width</li> <li><math>h</math> = height</li> <li><math>s</math> = length of a side</li> <li><math>b</math> = length of the base</li> <li><math>d</math> = diameter</li> <li><math>A</math> = area</li> <li><math>B</math> = area of the base</li> <li><math>P</math> = perimeter</li> <li><math>C</math> = circumference</li> <li><math>r</math> = radius</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.