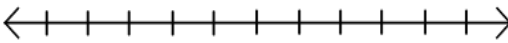
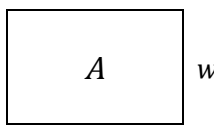


Approved Supplemental Mathematics Reference Sheet Grade 4

(For use by students on the MCAS Mathematics test who have this accommodation)

General Problem Solving Strategies	Symbols																																																																																																				
<ul style="list-style-type: none"> Reread question for clarity Draw a picture Make a table Circle or highlight key terms Calculate and solve See if my answer makes sense Circle my answer 	<p>> is greater than < is less than = is equal to</p>																																																																																																				
Place Value	Divisibility Rules																																																																																																				
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="6">Whole Numbers</th> <th colspan="2">Decimals</th> </tr> <tr> <th>Ht</th><th>Tt</th><th>Th</th><th>H</th><th>T</th><th>O</th><th>.</th><th>T</th><th>H</th> </tr> </thead> <tbody> <tr> <td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td> </tr> </tbody> </table>	Whole Numbers						Decimals		Ht	Tt	Th	H	T	O	.	T	H										<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 10%; text-align: center;">2</td> <td>If the last digit is even</td> </tr> <tr> <td style="text-align: center;">3</td> <td>If the sum of the digits can be divided by 3</td> </tr> <tr> <td style="text-align: center;">5</td> <td>If the last digit is 0 or 5</td> </tr> <tr> <td style="text-align: center;">6</td> <td>If the number is divisible by both 2 and 3</td> </tr> <tr> <td style="text-align: center;">9</td> <td>If the sum of the digits can be divided by 9</td> </tr> <tr> <td style="text-align: center;">10</td> <td>If the last digit is 0</td> </tr> </tbody> </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																																																														
Whole Numbers						Decimals																																																																																															
Ht	Tt	Th	H	T	O	.	T	H																																																																																													
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																																																																																																				
Number Line																																																																																																					
																																																																																																					
Hundreds Chart	Formulas																																																																																																				
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tbody> <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> </tbody> </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	<p><u>Area (A) of Rectangle</u> $A = l \times w$ ($l = \text{length}; w = \text{width}$)</p> <p><u>Area (A) Model</u></p> <div style="text-align: center;"> l  w </div> <p><u>Perimeter (P)</u> $P = \text{distance around}$</p>
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																																																																																												
Fractions																																																																																																					
Add or Subtract – need like denominators																																																																																																					

