| **General Problem Solving Strategies** | **Order of Operations** |
| --- | --- |
| * 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
 | **PEMDAS** 1. **P**arentheses (brackets, etc.)
2. **E**xponents
3. **M**ultiplication or **D**ivision (left to right)
4. **A**ddition or **S**ubtraction (left to right)
 |
| **Symbols**  | **Divisibility Rules** |
| $>$ is greater than $<$ is less than$=$ is equal to| x |= absolute value of *x*  |

|  |  |
| --- | --- |
| 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** |
|

| 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** |
| Number line |

| **Place Value** |
| --- |
|

|  |  |  |
| --- | --- | --- |
| Whole Numbers  |   | Decimals  |
| Hundred- thousands  | Ten- thousands  | Thousands  | Hundreds  | Tens  | Ones  | .  | Tenths  |  Hundredths   |
|   |   |   |   |   |   |   |   |   |

 |
| **Geometric Measurement** | **Percentages and Proportions** |
| Perimeter $=distance around$ | * $\frac{is}{of}=\frac{\%}{100}$
*
* $if \frac{a}{b}= \frac{c}{d}, then ad=bc$
 |
| **Statistics** | **Coordinate Plane** |
| * me**A**n-Average
* **Mo**de-Most Often
* me**DI**an-Middle
* **R**ang**E-** Least to Greatest
 | Coordinate plane |
| **Properties** | **Fractions** |
| * $a\left(b+c\right)=ab+ac$
* $a+\left(b+c\right)=\left(a+b\right)+ c$
* $a ⦁\left(b ⦁ c\right)=\left(a ⦁ b\right) ⦁ c$
* $a ⦁ b=b ⦁ a$
* $a+b=b+a $
 | * $\frac{a}{b}+\frac{c}{d}=\frac{ad+bc}{bd}$
* $\frac{a}{b}-\frac{c}{d}=\frac{ad-bc}{bd}$
* $\frac{a}{b}⦁ \frac{c}{d}=\frac{ac}{bd}$
* $\frac{a}{b}÷\frac{c}{d}=\frac{ad}{bc} $
 |

| **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** |  |  |  |  |  |  |  |  |  |  |  |  |

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