**Basic Arithmetic**
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**Definition:** arithmetic is the result of adding two or more numbers together

**Topic #1:**   Counting Each Object One-by-One

For example:



To solve this problem, number each ring orally to count them up...



Count: "1....        2....         3....     4....     5....

Use your fingers as you count the rings as a visual aid.

**Exercises:**

| Problems | Answers |
|---|---|
|  = _____ | 6 |
|  = _____ | 2 |
|  = _____ | 6 |

**More Exercises:**

| Problems | | | | | | | | Answers |
|---|---|---|---|---|---|---|---|---|
| 1 | + | 4 | = _____ | | | | | 5 |
| 3 | + | 4 | = _____ | | | | | 7 |
| 2 | + | 4 | = _____ | | | | | 6 |
| 2 | + | 3 | + | 1 | = _____ | | | 6 |
| 4 | + | 5 | + | 1 | = _____ | | | 10 |

**Topic #2:**    Adding Two-Digit Numbers

Example:        14    +    11    = _____

*write as*        14
              + 11

To solve this problem, split the numbers into two separate columns and add each column.

```
  1      4
 +1     +1           =           25
  2      5
```

**Exercises:**

| Problems | | | | Answers |
|---|---|---|---|---|
| 13 | + | 14 | = _____ | 17 |
| 29 | + | 10 | = _____ | 39 |
| 12 | + | 47 | = _____ | 59 |

**Topic #3:** Carrying Over Sums

| 2 | | 1 |
|---|---|---|
| tens column | | ones column |
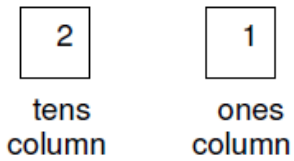
To add two digit numbers when the sum of the ones column exceeds 9, carry over the tens digit of the sum.

Example:           $18 + 4 = $ _____

write as

$$\begin{array}{r} 18 \\ +4 \\ \hline \end{array} \Longrightarrow \begin{array}{r} 8 \\ +4 \\ \hline 12 \end{array}$$

*(carry over the one to the tens column)*

*the one that is carried over* ⟹ 1

$$\begin{array}{r} 18 \\ +4 \\ \hline 22 \end{array}$$

**Exercises:**

| Problems | Answers |
|---|---|
| 34 + 16 = _____ | 50 |
| 42 + 19 = _____ | 61 |