

Algorithm – a set of step-by-step directions for carrying out computation, such as addition, subtraction, multiplication, and division

Example

$$348 + 177 = ?$$

	100s	10s	1s
	3	4	8
+	1	7	7
<hr/>			
	4	0	0
	1	1	0
		1	5
<hr/>			
	5	2	5

Add the 100s. $300 + 100 \rightarrow$

Add the 10s. $40 + 70 \rightarrow$

Add the 1s. $8 + 7 \rightarrow$

Add the partial sums. $400 + 110 + 15 \rightarrow$

$$348 + 177 = 525$$

Attribute Blocks – a set of blocks in which each block has one each of four attributes including color, size, thickness and shape



Ballpark Estimate – a rough estimate that’s “in the ballpark”; can serve as a check of reasonableness of an answer obtained through some other procedure, or it can be made when an exact value is unnecessary or is impossible to obtain



“About how many people live in the U.S.?”

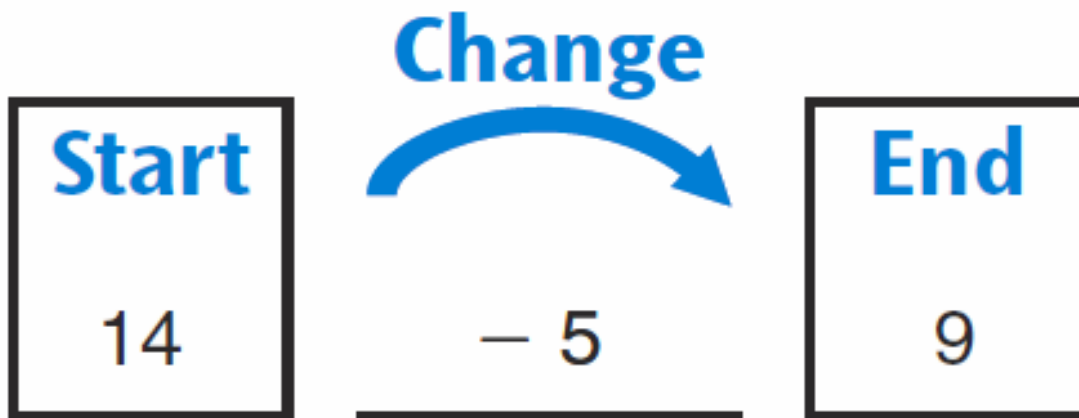
“About 305 million!”

Centimeter (cm) – a metric unit of length, equivalent to 10 millimeters, $\frac{1}{10}$ of a decimeter, and $\frac{1}{100}$ of a meter

A centimeter is approximately the width of your pointer finger.



Change Diagram – a diagram used to model situations in which quantities are either increased or decreased by addition or subtraction



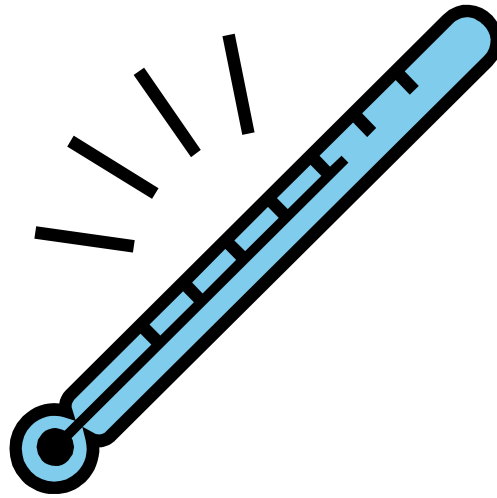
A change diagram for $14 - 5 = 9$

Change-to-more Number Story – a story problem in which addition is used

**Abby had \$52. She earned \$15 raking leaves.
How much money does Abby have now?**

$$\begin{array}{r} \$52 \\ +15 \\ \hline \$67 \end{array}$$

Degree Marks – markings on a thermometer that are used to measure temperature



Degrees Celsius – a temperature scale on which water freezes at 0° and boils at 100°

0°

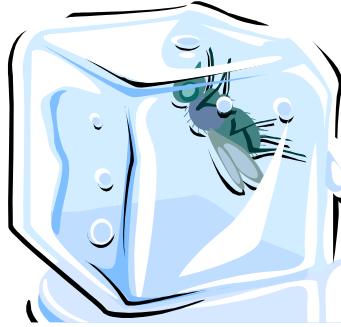


100°



Degrees Fahrenheit – a temperature scale on which water freezes at 32° and boils at 212°

32°



212°



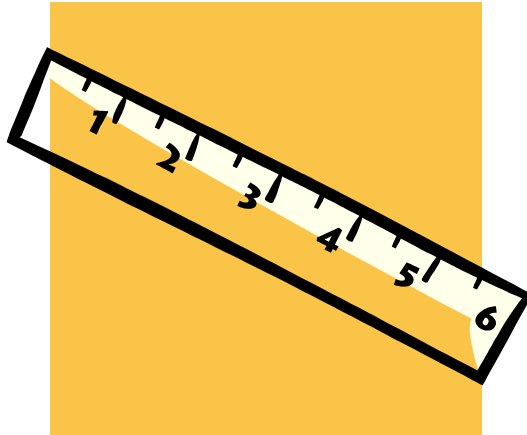
Estimate – an answer close to, or approximating, an exact answer



About how much candy is in the jar?

About 20 pieces

Inch – a U.S. customary unit of length equal to $\frac{1}{12}$ of a foot

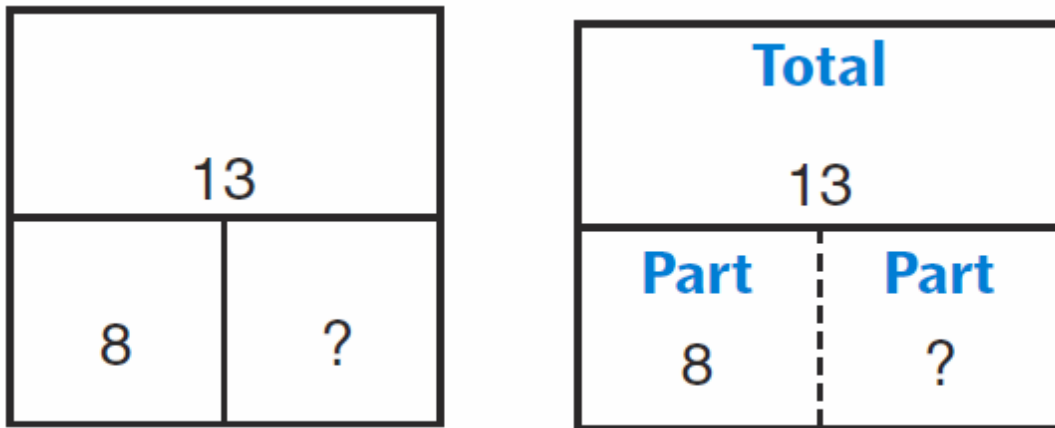


Mental Arithmetic – doing mathematics calculations in one's head, without pencil and paper



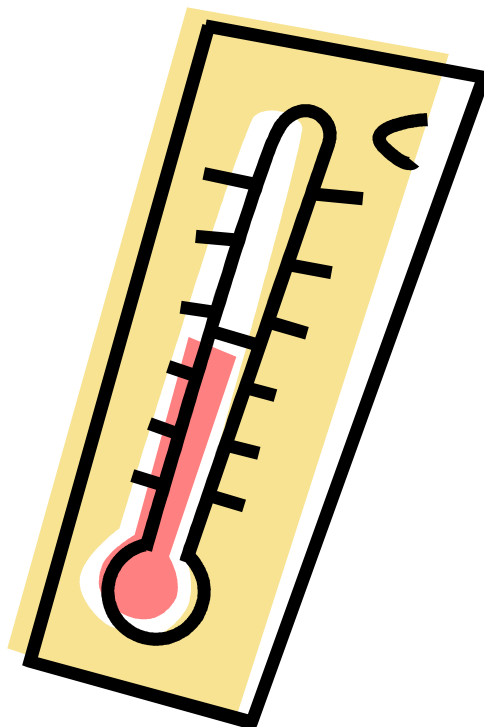
Let's see . . . $6 + 6 = 12$,
so $6 + 7$ would be one
more, so $6 + 7 = 13!$

Parts and Total Diagram – a diagram used to model problems in which two or more quantities (parts) are combined to get a total quantity



Parts-and-total diagrams for $13 = 8 + ?$

Thermometer – a device used to measure temperature



Tiling – to cover a surface with shapes so that there are no gaps or overlaps

