1. Division with remainder

76:9

231:15

622:9

- 2. Claus has \$2. How many 27 cent chocolate bars can he buy?
- 3. A plastic bag may hold 15 cans of yogurt without tearing. How many plastic bags are needed to carry 72 cans of yogurt?
- 4. John came to a lemonade stand with a big empty pitcher which can hold 5 liters of lemonade. He wanted to buy only 1 liter of lemonade, but a merchant had jars which can hold 3 liters (3L) and 2 liters(2L) of liquid. How merchant can measure 1L. of lemonade if jars do not have any marks on them?

Next time when John came to the stand with exactly the same pitcher, the merchant had only 3L and 5L jars. Can he sell to John exactly 4L of lemonade?

- 5. Divisibility traits:
  - a number is divisible by 2 if it ends in an even digit.
     Underline numbers divisible by 2: 25, 36, 80, 47
  - a number is divisible by 5 if it ends in 0 or 5 Underline numbers divisible by 5: 25, 40, 56, 75
  - a number is divisible by 3 if the total of its digits is divisible by 3 Underline numbers divisible by 3: 87, 34, 57, 91
  - a number is divisible by 9 if the total of its digits is divisible by 9 Underline numbers divisible by 9: 45, 49, 91, 135
  - a number is divisible by 11 if the total of its digits in the odd places equals the total of its digits in the even places Underline numbers divisible by 11: 121, 144, 567, 242

## **Geometry**

A **definition** is a statement of the meaning of a something (term, word, another statement).

**Point** (an undefined term).

In geometry, a point has no dimension (actual size). A point is an exact position or location on a plane surface. A point is not a thing, but a place and it has no width, or thickness. Our dot can be very tiny or very large and it still represents a point. A point is usually named with a capital letter.



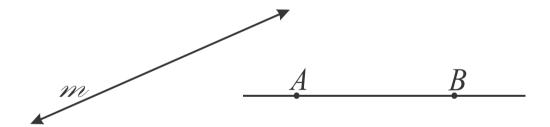
Line (an undefined term).

A line has no beginning point or end point. Imagine it continuing indefinitely in both directions.

A line has no thickness.

**A line** is drawn as a straight line (unless it is indicated that the line is not straight) with two arrowheads (or without them) indicating that the line extends without end in both directions.

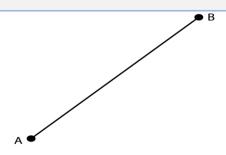
**A line** is named by a single lowercase letter (m), or by any two points on the line,  $\overrightarrow{AB}$  or AB.

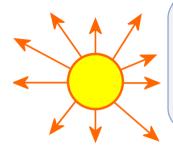


When two points are connected with a straight line, we get a <u>line segment</u>.

A **line segment** is also a part of a straight line between two chosen points.

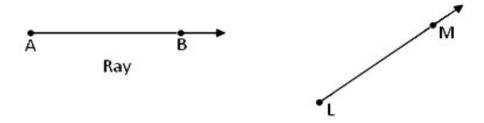
These points are called endpoints. A segment is called by its endpoints- **Segment AB** 





A **ray** is a part of a straight consisting of a point (endpoint)

And all points of the straight line at one side of an endpoint. A **ray** is named by endpoint and any other point-**Ray** AB or AB(where A is an endpoint)



- 6. Draw two line segments AB and CD in such way that their intersect
  - a. by a point
  - b. by a segment
  - c. don't intersect at all.
- 7. Using a ruler draw a straight line, put on it 3 points, A, B, and C so that 2 rays are formed, BC and BA.

## Remember the differences between the three:

