Draw a line and mark two points on the line. The straight line between two given points forms a **segment**.

$$\underset{\underset{\displaystyle A}{\bullet}\qquad\qquad\underset{\displaystyle B}{\bullet}}{\rule{4cm}{0.4pt}}$$

Draw a straight line. Mark one point on it, point A. All points of a straight line on one side of a chosen point is a **ray**. Point A produces two rays.

Image: a straight line with arrows on both ends and point A marked on it.

If we draw two rays from the same endpoint, we will get an **angle**.

Image: two rays from common vertex O, with point A on one ray and point B on the other, shaded angle region.
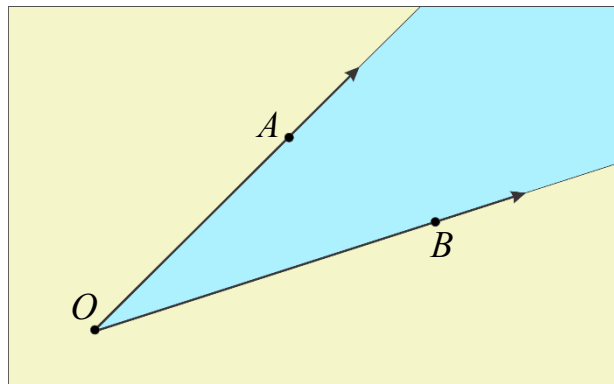
Angles' notations are usually three capital letters with the vertex letter in the middle ∠AOB

If a point marked on a line, it produces two rays with the common vertex, therefore it's an angle. This angle has its own name: **a straight angle**, ∠*BAD*.

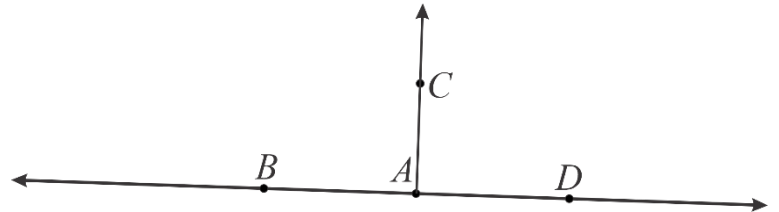Image: a straight line with arrows on both ends and points B, A, D marked on it.

If another ray is coming from the vertex of a straight angle, it creates two more angles, $\angle CAB, \angle CAD$.
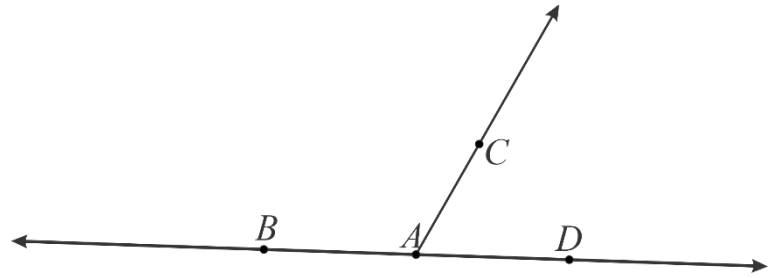
Such angles we call **supplementary angles**.
Measure of a straight angle is 180°, measure of a right angle is 90° in the system with 360° degrees of the full rotation.

Homework

1. The cats of the Siberian, Angora, Persian and Siamese breeds were presented at the exhibition of cats. Siamese cats were 2 times more than Angora, Persian was 1.5 times more than Siamese, and Siberian was 13 less than Persian. How many cats of each breed were there if there were 77 cats in total?
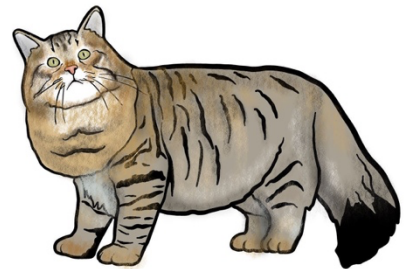
2. Draw 2 lines and mark 5 points so that each line contains 3 points.

3. Draw 4 lines and mark 6 points so that each line contains 3 points.

4. Draw two rays so that their intersection is
   a. A point
   b. A segment
   c. A ray.

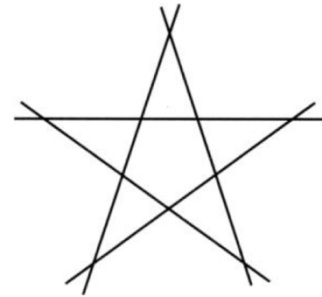5. Draw a quadrilateral which has three right angles. What would be the fourth angle?

6. Draw a square. Draw the diagonals in this square. Which angle the diagonal forms? Why do you think so?
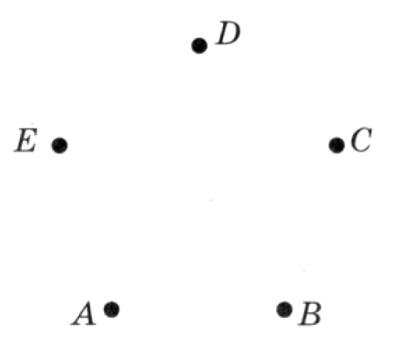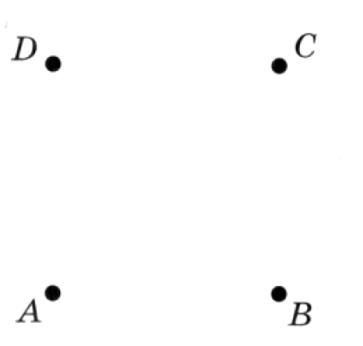
7. Do the calculation:

$0.8 + 0.02;$ $4.2 - 0.02;$ $4 - 1.75;$

$2.5 \cdot 0.08;$ $21.6 \cdot 0.1;$ $3.4 + 0.16$

8. How many lines are there on the picture on the right?

9. How many lines can be drawn through 4 points? 5 points? (Each line passes through two marked points)

10. How many lines you need to create a cube?