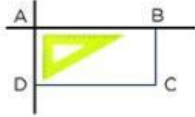


## Nội dung ôn tập học kì II

### A. Perpendicular and parallel lines

#### Vocabulary



AB and AD are two **perpendicular lines**.



AB and DC are two **parallel lines**.  
Two parallel lines never **intersect**.

### B. Parallelogram and Rhombus

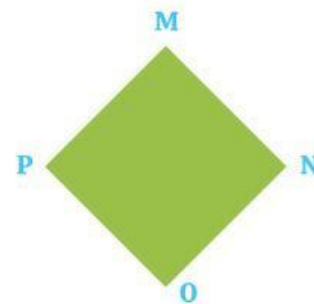
#### Vocabulary



**parallelogram**

A parallelogram has two pairs of parallel and equal sides.

- AB and DC; AD and BC are **opposite sides**.
- AB and DC; AD and BC are **parallel**.
- AB and DC; AD and BC are **congruent**.
- **AB = DC** and **AD = BC**



**rhombus**

•A rhombus has 2 pairs of parallel sides and 4 equal sides.

- MN and PO; MP and NO are **parallel sides**.
- MN = NO = OP = PM (4 sides are **congruent**.)

### C. Second and Century

Second and century are units of time.

1. Second:

- 1 minute = 60 seconds = 60s
- 1 hour = 60 minutes.

2. Century: 1 century = 100 years

### D. Multiplication and Division

#### Multiplication many-digit numbers with one/two-digit numbers

$$\begin{array}{r} 150\ 500 \\ \times \quad 7 \\ \hline 1\ 053\ 500 \end{array}$$

- 7 times 0 equals 0, write 0.
- 7 times 0 equals 0, write 0.
- 7 times 5 equals 35, write 5, carry 3.
- 7 times 0 equals 0, 0 plus 3 equals 3, write 3.
- 7 times 5 equals 35, write 5, carry 3.
- 7 times 1 equals 7, 7 plus 3 equals 10, write 10.

$$150\ 500 \times 7 = 1\ 053\ 500$$

#### Division many-digit numbers by one/two-digit numbers

$$\begin{array}{r} 125\ 556 \quad | \quad 5 \\ 25 \\ \hline 05 \\ 05 \\ \hline 06 \\ 05 \\ \hline 1 \end{array}$$

- 12 divided by 5 equals 2, write 2. 2 times 5 equals 10, 12 minus 10 equals 2, write 2.
- Take down 5, 25 divided by 5 equals 5, write 5.
- 5 times 5 equals 25, 25 minus 25 equals 0, write 0.
- Take 5 down, 5 divided by 5 equals 1, write 1. 1 times 5 equals 5, 5 minus 5 equals 0.
- 1 times 5 equals 5, 5 minus 5 equals 0.
- Take 6 down, 6 divided by 5 equals 1, write 1.
- 6 minus 5 equals 1.

$$125\ 556 : 5 = 25\ 111\ r\ 1$$

## Nội dung ôn tập học kì II

### E. Commutative Property and Associative Property of Multiplication

#### 1. Commutative Property.

Switching the factors in a product does not change the product.

$$a \times b = b \times a$$

Ex:  $6 \times 5 = 5 \times 6$

#### 2. Associative Property.

- When multiplying the product of two numbers by a third number, we can multiply the first number by the product of the second and third numbers.

- $(a \times b) \times c = a \times (b \times c)$

- Ex:  $(3 \times 2) \times 4 = 3 \times (2 \times 4)$

#### 3. Distributive Property of Multiplication.

- When multiplying a sum by a number, we can multiply each part of the sum by that number and then add the results together.

$$(a + b) \times c = a \times c + b \times c.$$

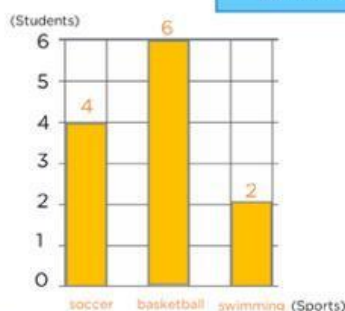
- When multiplying a number by a sum, we can multiply that number by each part of the sum and then add the results together.

$$a \times (b + c) = a \times b + a \times c.$$

### F. Statistics and Probability

1. Lucy just conducted a survey about each student's favorite sport in the group and recorded the results as follows:

Kinds of sport	Soccer	Basketball	Swimming
Votes	● ● ● ●	● ● ● ● ● ●	● ●
Number of students	4	6	2



- The row below lists the names of the sports.
- The numbers on the left of the chart indicate the number of students.
- Each column represents the number of students who prefer the sport.
- The number at the top of each column indicates the number of students represented by that column.

The bar chart above presents:

- 3 favorite sports are: soccer, basketball, swimming.
- The number of students who prefer soccer is 4, basketball is 6, swimming is 2.
- A taller column represents more students, while a shorter column represents fewer students.

#### 2. Average

- To find the average of several numbers, we add up all the numbers and then divide the sum by the number of numbers.

Example: Find the average of 15, 16, 17.

- Divide the sum of 15, 16, 17 by 3:  $(15 + 16 + 17) : 3 = 16$

- 16 is the average of 15, 16, 17.

## Nội dung ôn tập học kì II

### G. Fraction



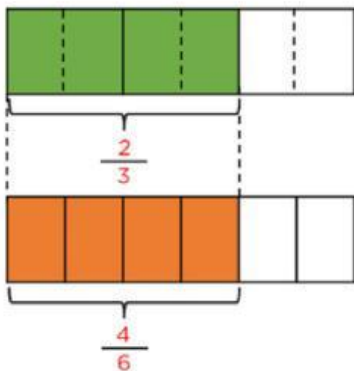
Divide the circle into 6 pieces

$\frac{1}{6}$  and  $\frac{2}{6}$  are fractions.

1 and 2 are numerators.

6 is denominator.

Numerator is above, denominator is different from 0 under the dash.



### Equivalent Fractions

$$\frac{2}{3} = \frac{2 \times 2}{3 \times 2} = \frac{4}{6} \quad \text{or} \quad \frac{4}{6} = \frac{4 : 2}{6 : 2} = \frac{2}{3}$$

Fraction  $\frac{2}{3}$  is equal to fraction  $\frac{4}{6}$ . Write:  $\frac{2}{3} = \frac{4}{6}$

### Fraction simplification

Ways to simplify fraction:

Example: Simplify  $\frac{25}{35}$ .

- 25 and 35 are both divisible by 5.
- Dividing the numerator and the denominator by 5, we get:

$$\frac{25}{35} = \frac{25 : 5}{35 : 5} = \frac{5}{7}$$

- Fraction  $\frac{25}{35}$  is simplified to  $\frac{5}{7}$ .

### Comparing two fractions (of the same denominator)

For two fractions with the same denominator:

- The fraction with the larger numerator is greater.
- The fraction with the smaller numerator is smaller.
- If the two numerators are equal, the two fractions are equal.

$$\frac{4}{6} > \frac{1}{6} \quad \text{Four - sixths is greater than one - sixth.}$$

$$\frac{1}{6} < \frac{4}{6} \quad \text{One - sixth is smaller than four - sixths.}$$

### Adding fractions (of the same denominator)

$$\frac{1}{6} + \frac{2}{6} = ?$$

$$\frac{1}{6} + \frac{2}{6} = \frac{1+2}{6} = \frac{3}{6}$$

To add two fractions of the same denominator, we add the numerators and keep the denominator the same.