

PONY

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Math

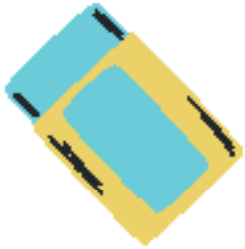
Monthly Revision of  
February and March

3<sup>rd</sup>

Primary

Second Term

2026



# Summary of February and March

## Chapter 7

### Associative Property:

- To find the product of three numbers using:

” The Associative Property of Multiplication ”

- 1 Place any two of the three numbers in **parentheses**.
- 2 Multiply the **two** numbers in the parentheses first.
- 3 Multiply the result by the **third** number.

#### EXAMPLE

$$3 \times 5 \times 2 = (3 \times 5) \times 2 = 3 \times (5 \times 2) = (2 \times 3) \times 5 = 30$$

#### NOTES

- When multiplying three numbers together:

- ▶ Multiply the numbers inside the **parentheses** first.
- ▶ The product does not change with the **position** of the **parentheses**.  
(Associative Property)
- ▶ The product does not change with the **order** of the **numbers**.  
(Commutative Property)

### Distributive Property:

- The Distributive Property of Multiplication:

It is a property used to solve multiplication problems more easily by **dividing** (breaking apart) the larger factor into two smaller numbers using addition and then **distributing** the multiplication over the addition.

#### EXAMPLE

$$4 \times 9 = 4 \times (6 + 3) = (4 \times 6) + (4 \times 3) = 24 + 12 = 36$$

You can divide the number 9 in other ways.

## Estimation:

- **Estimation:** It is a way to get a result **close** to the **actual result** and **verify** the plausibility of the answer.

The product can be estimated as follows:

- Replace one of the multiplication factors with another nearby number (preferably 5 or 10, whichever is closer). This simplifies the multiplication process. (Adjacent Number Facts Strategy)
- Find the estimated product and the actual product, and compare them.

• **EXAMPLE** Estimate the **product**, then find the **actual result**:

•  $6 \times 8$

• **Estimate** •

By replacing 6 with 5,  
you get:  $5 \times 8 = 40$ .

5 is **less than** 6.  
So, the actual product is  
**greater than** 40.

By replacing 8 with 10,  
you get:  $6 \times 10 = 60$ .

10 is **greater than** 8.  
So, the actual product is  
**less than** 60.

• **Actual Product** •

$$6 \times 8 = 48$$

$$48 > 40$$

$$48 < 60$$

1  $4 \times 18$

• **Estimate** •

By replacing 18 with 20, you get:  $4 \times 20 = 80$ .

20 is **greater than** 18.  
So, the actual product is **less than** 80.

• **Actual Product** •

$$\begin{aligned} 4 \times 18 &= 4(10 + 8) \\ &= (4 \times 10) + (4 \times 8) \\ &= 40 + 32 = 72 < 80 \end{aligned}$$

2  $3 \times 4 \times 2$

• **Estimate** •

By replacing 4 with 5, you get:  
 $3 \times 5 \times 2 = 3 \times (5 \times 2) = 3 \times 10 = 30$ .  
5 is **greater than** 4.

So, the actual product is **less than** 30.

• **Actual Product** •

$$\begin{aligned} 3 \times 4 \times 2 &= 3 \times (4 \times 2) \\ &= 3 \times 8 = 24 \\ 24 &< 30 \end{aligned}$$

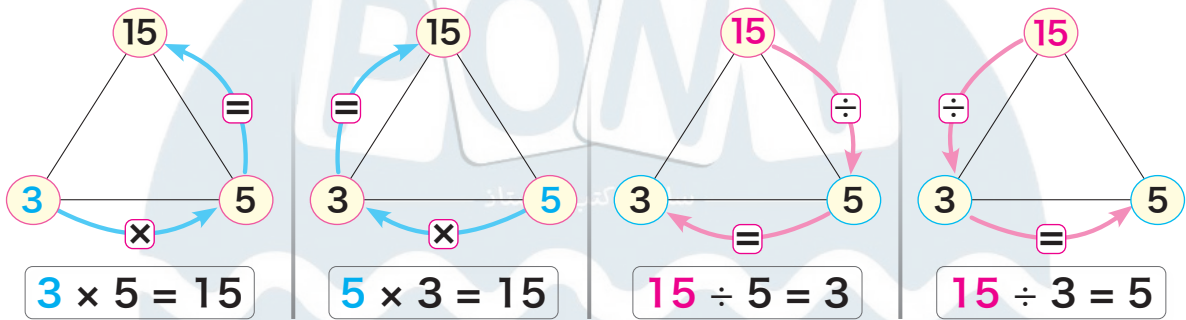
## Applications on Multiplication and Division:

- **Multiplication** and **division** are inverse operations, so we can use the multiplication problem to check the quotient in the division problem.

$$\begin{array}{ccccccc}
 & & 15 & \div & 3 & = & 5 \\
 & \swarrow & & & \uparrow & & \swarrow \\
 \text{Dividend} & & & & \text{Divisor} & & \text{Quotient}
 \end{array}$$

**Fact family** is a set of related multiplication and division equations using the same numbers.

**For example:** The set of facts for the numbers 15, 3, and 5 is:



## Perimeter of a Square and a Rectangle:

**Perimeter:** It is the length of the outer line that defines the shape.

**Perimeter of a polygon** = the sum of the lengths of its sides.

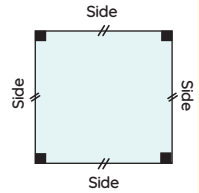
**Square:** It has 4 sides of **equal** length and 4 **congruent** vertices.

**Rectangle:** It has 2 short sides and 2 long sides; each pair of opposite sides is **parallel** and **equal** in length, and there are 4 **congruent** vertices.

**First Square:****Perimeter of the square**

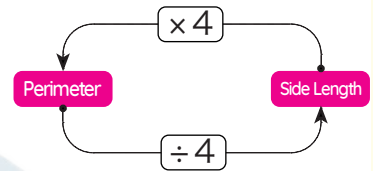
= Sum of its side lengths (All sides are equal.)

= Side length + Side length + Side length + Side length



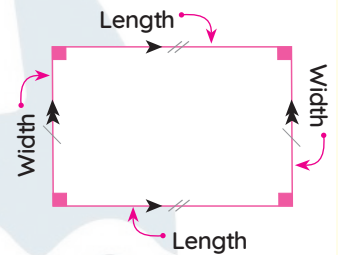
**Perimeter of the square** = Side lengths  $\times 4$

**Side length of the square** = Perimeter  $\div 4$

**Second Rectangle:****Perimeter of the rectangle**

= Sum of its side lengths

= Length + Width + Length + Width



**Perimeter of the rectangle** = (Length + Width)  $\times 2$

**Steps of Solving Story Problems:**

- 1 **READ:** Read the problem to understand.
- 2 **CONSIDER:** Underline the important facts and look for patterns.
- 3 **PLAN:** Draw a picture, if needed, to help you solve the problem.
- 4 **WRITE:** Write an equation of numbers for the problem.
- 5 **SOLVE:** Solve the problem. Show your steps.
- 6 **EVALUATE:** Does your answer make sense? If not, try again.

# Chapter 8

## Equal parts:

- **Fraction:** It is one or more **equal** parts of a whole (one whole).

## Fractions as parts of a whole:

2 parts → (  $\frac{1}{2}$  , A half )

3 parts → (  $\frac{1}{3}$  , A third )

4 parts → (  $\frac{1}{4}$  , A fourth )

5 parts → (  $\frac{1}{5}$  , A fifth )

6 parts → (  $\frac{1}{6}$  , A sixth )

7 parts → (  $\frac{1}{7}$  , A seventh )

8 parts → (  $\frac{1}{8}$  , An eighth )

9 parts → (  $\frac{1}{9}$  , A ninth )

## A fraction consists of:

### Numerator

It represents the number of **shaded** equal parts.

It's written above the fraction bar.

3

4

### Denominator

It represents the **total** number of equal parts.

It's written below the fraction bar.

- **Reading a fraction:** Read the numerator first, then read what the denominator represents in equal parts.

- **Unit fraction:** It is a fraction with 1 as the numerator.

► It represents one unit, or one part of a whole.

(  $\frac{1}{2}$  ,  $\frac{1}{3}$  ,  $\frac{1}{4}$  ,  $\frac{1}{5}$  ,  $\frac{1}{6}$  ,  $\frac{1}{7}$  , ... and so on are **unit fractions**.)

## EXAMPLES

$$\frac{2}{3} = \text{Two-thirds}$$

$$\frac{3}{4} = \text{Three-fourths}$$

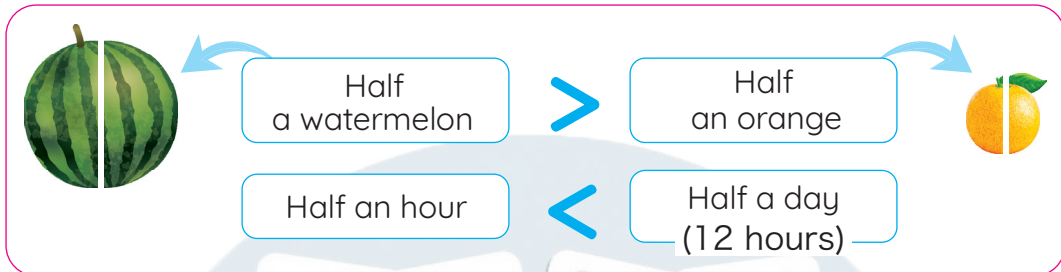
$$\frac{5}{7} = \text{Five-sevenths}$$

## Comparing Unit Fractions:

- Fractions are not equal if the units are not equal.

When comparing the sizes or quantities of **different** things, half of the larger thing is **greater than** half of the smaller thing.

### EXAMPLE



## Expressing one using the unit fraction:

- When a whole unit is divided into equal parts, each of these parts represents a **unit fraction**.

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$$1 = \frac{2}{2} = \frac{3}{3} = \frac{4}{4} = \frac{5}{5} = \frac{6}{6} = \frac{7}{7} = \frac{8}{8} = \frac{9}{9}$$

### EXAMPLE

- When a whole unit is divided into:

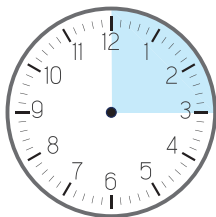
- Two equal parts:

Then the number of halves in one whole = 2. That is:  $1 = \frac{2}{2}$

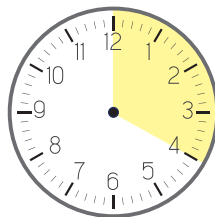
- Three equal parts:

Then the number of thirds in one whole = 3. That is:  $1 = \frac{3}{3}$

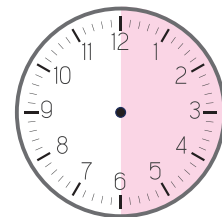
$$1 \text{ hour} = 60 \text{ minutes}$$



$$\frac{1}{4} \text{ hour} = 15 \text{ minutes}$$



$$\frac{1}{3} \text{ hour} = 20 \text{ minutes}$$



$$\frac{1}{2} \text{ hour} = 30 \text{ minutes}$$

## Chapter 9

### Representing Unit Fractions on a Number Line:

- The number line is used to represent fractions by dividing the distance between 0 and 1 into **equal parts** according to the **denominator** of the fraction to be represented.

#### EXAMPLE

- Represent **fourths** on the number line:

1

- Draw a line. - Mark 0 on the left.
- Mark 1 on the right.



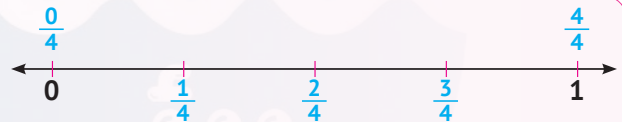
2

- Divide the distance between 0 and 1 into 4 **equal parts**.



3

- Each part is  $\frac{1}{4}$ ,  $0 = \frac{0}{4}$ ,  $1 = \frac{4}{4}$ .

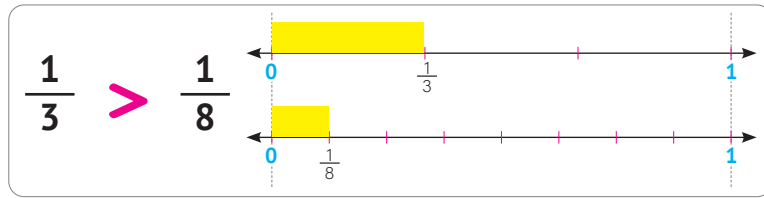


### Comparing Unit Fractions Using the Number Line:

- To compare two **unit fractions** using the number line:
  - Use 2 number lines, one to represent **each fraction**.
  - Be sure the points that correspond to 0 and 1 line up directly **beneath** one other.
  - Compare the distance from 0 to **each fraction**.

**EXAMPLE**

- Compare  $\frac{1}{3}$  and  $\frac{1}{8}$  :

**EXAMPLE**

- Represent  $\frac{3}{5}$  on the number line:

**1**

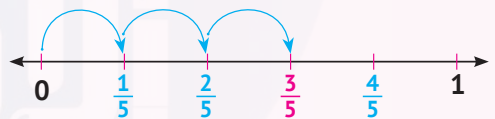
- Draw a line.
- Mark 0 on the left.
- Mark 1 on the right.

**2**

According to the denominator, 5,  
divide the distance between  
0 and 1 into 5 equal parts.

**3**

According to the denominator, 5,  
make 3 jumps, starting from 0, until you  
reach the point that represents  $\frac{3}{5}$ .



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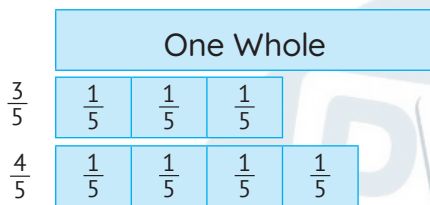
## Comparing Two Fractions With the Same Denominator:

### EXAMPLE

- Compare  $\frac{3}{5}$  and  $\frac{4}{5}$  :

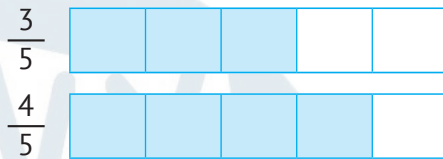
You can compare two fractions with the same denominator in different ways:

#### Using Fraction Strips



The strips for  $\frac{3}{5}$  are shorter than the strips for  $\frac{4}{5}$ .

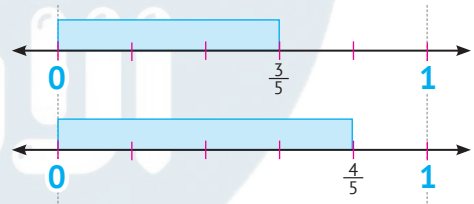
#### Using Models



The colored parts of  $\frac{3}{5}$  are less than the colored parts of  $\frac{4}{5}$ .

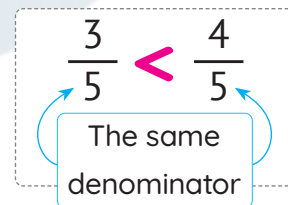
#### Using Number Lines

The distance from 0 to  $\frac{3}{5}$  is shorter than the distance from 0 to  $\frac{4}{5}$ .



#### Generally

When comparing fractions with the same denominator, the one with the **greater numerator** is **greater**.



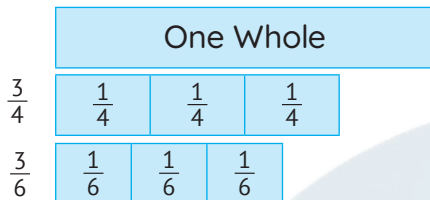
Because the two fractions have the **same denominator**, 5, and  $3 < 4$ .

## Comparing Two Fractions With the Same Numerator:

### EXAMPLE

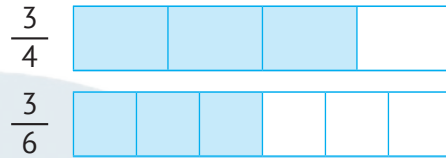
- Compare  $\frac{3}{4}$  and  $\frac{3}{6}$  :

#### Using Fraction Strips



The strips for  $\frac{3}{4}$  are longer than the strips for  $\frac{3}{6}$ .

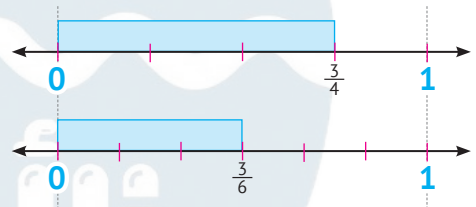
#### Using Models



The colored parts of  $\frac{3}{4}$  are more than the colored parts of  $\frac{3}{6}$ .

#### Using Number Lines

The distance from 0 to  $\frac{3}{4}$  is longer than the distance from 0 to  $\frac{3}{6}$ .



#### Generally

When comparing fractions with the same numerator, the one with the **greater denominator** is **smaller**.

The same numerator

$$\frac{3}{4} > \frac{3}{6}$$

Because the two fractions have the same numerator, 3, and  $4 < 6$ .

## Adding and Subtracting Two Fractions With the Same Denominator:

• To add or subtract fractions with a common denominator:

- ① Add or subtract the **numerators** of both fractions.
- ② Keep the **denominators** the same without changing.

### Generally

**ADD** the numerators.

$$\frac{2}{6} + \frac{3}{6} = \frac{5}{6}$$

Diagram illustrating the addition of two fractions with the same denominator. The numerators 2 and 3 are added to get 5, and the denominator 6 remains the same. A dashed box above the numerators contains the equation  $2 + 3 = 5$ . Arrows point from the numerators to the result numerator, and from the denominator to the result denominator.

**KEEP** the denominators.

**SUBTRACT** the numerators.

$$\frac{5}{6} - \frac{2}{6} = \frac{3}{6}$$

Diagram illustrating the subtraction of two fractions with the same denominator. The numerators 5 and 2 are subtracted to get 3, and the denominator 6 remains the same. A dashed box above the numerators contains the equation  $5 - 2 = 3$ . Arrows point from the numerators to the result numerator, and from the denominator to the result denominator.

**KEEP** the denominators.

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# February and March Model Exams

## Model 1

**First:** Choose the correct answer:

1  $7 \times 12 = 7 \times (9 + \dots\dots\dots)$

(a) 4

(b) 5

(c) 6

(d) 3

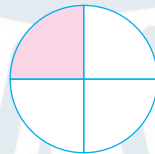
2 What is the fraction that represents the shaded part in the figure?

(a)  $\frac{1}{4}$

(b)  $\frac{1}{8}$

(c)  $\frac{1}{2}$

(d)  $\frac{1}{3}$



**Second:** Answer the following:

1 Janna baked 45 loaves of bread and wanted to share them with 5 of her friends. How many loaves will each friend get?

.....  
.....

2 Find the result of  $7 \times 14$  using two different methods.

.....  
.....

3 Find the perimeter of a rectangle with a length of 8 cm and a width of 4 cm.

.....  
.....

4 Malik put 6 figs in a basket, while Mazen put 10 figs in another basket. Which is larger: half of Malik's basket or half of Mazen's basket?

.....  
.....

Model 2

**First:** Choose the correct answer:

1  $16 \div \dots = 2$

a 24

b 8

c 2

d 1

2  $\frac{1}{4} > \dots$

a  $\frac{1}{4}$

b  $\frac{1}{8}$

c  $\frac{1}{2}$

d  $\frac{1}{3}$

**Second:** Answer the following:

1 Find the result of  $36 \div 3$  using your preferred strategy.

.....  
 .....

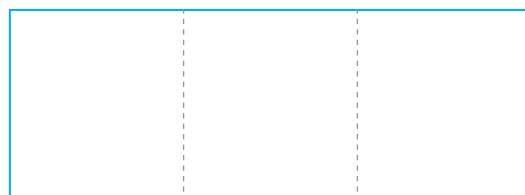
2 Estimate the product of  $9 \times 5$ , then find the actual result.

.....  
 .....

3 Laila bought 24 seeds and has 5 pots. She wants to plant 3 seeds in each pot. How many extra pots does she need to plant all the seeds?

.....  
 .....

4 How many equal parts is the shape in front of you divided into?



Model 3

**First:** Choose the correct answer:

1 Janna had 24 apples. She divided the apples equally into 6 plates.  
How many apples are on each plate?

- (a) 2                      (b) 3                      (c) 4                      (d) 12

2 The number of sixths in one whole is ..... sixths.

- (a) three                      (b) four                      (c) five                      (d) six

**Second:** Answer the following:

1 Find the side length of a square whose perimeter is 20 m.

.....  
 .....  
 .....

2 Amir has 4 boxes. Each box contains 3 dolls, and each doll has 2 buttons. What is the total number of buttons?

.....  
 .....

3 Solve the following to find the unknown number:  $2 \times (5 \times \dots) = 50$ .

.....  
 .....

4 Which is smaller:  $\frac{1}{3}$  or  $\frac{1}{5}$ ?

.....  
 .....

Model 4

**First:** Choose the correct answer:

1 If 8 counting items are divided into quarters, each quarter equals ..... of the items.

- (a) 2                      (b) 4                      (c) 16                      (d) 8

2  $\frac{3}{7} >$  .....

- (a)  $\frac{3}{4}$                       (b)  $\frac{3}{7}$                       (c)  $\frac{3}{6}$                       (d)  $\frac{3}{8}$

**Second:** Answer the following:

1 Find the length of a rectangle whose perimeter is 24 m and whose width is 5 m.

.....  
 .....

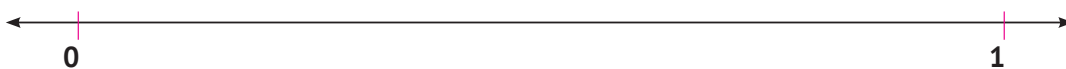
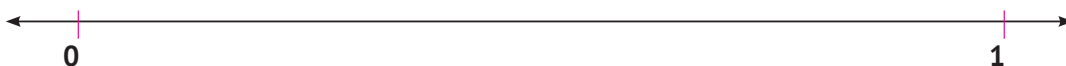
2 Divide the clock into thirds.



3 Find the result of  $4 \times 5 \times 2$  using your preferred strategy.

.....  
 .....

4 Use two number lines to determine which is greater:  $\frac{1}{5}$  or  $\frac{1}{4}$ ?



**Model 5**

**First:** Choose the correct answer:

1  $\frac{1}{5}$  of the number 15 = .....

- (a) 3                      (b) 4                      (c) 5                      (d) 12

2 Wael divided 21 oranges among 7 people. What is each person's share?

- (a) 3                      (b) 4                      (c) 5                      (d) 6

**Second:** Answer the following:

1 A square has a side length of 7 m. Find its perimeter.

.....  
 .....

2 Find the result of the following using the associative property:  $7 \times 4 \times 5$ .

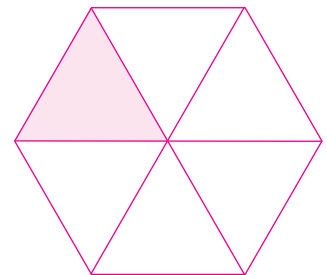
.....  
 .....

3 Arrange the following fractions from smallest to largest:

$\frac{1}{3}$  ,  $\frac{1}{9}$  ,  $\frac{1}{7}$  ,  $\frac{1}{5}$

.....

4 Write the name of the fraction that represents the shaded part in the opposite figure: .....



# Answers

## Model 1

First:

1 3

2  $\frac{1}{4}$

Second:

1 Number of loaves each friend will get =  $45 \div 5 = 9$  loaves.

2 First method:

$$7 \times 14 = 7 \times (10 + 4)$$
$$= 7 \times 10 + 7 \times 4 = 70 + 28 = 98$$

Second method:

$$7 \times 14 = 7 \times (7 + 7)$$
$$= 7 \times 7 + 7 \times 7 = 49 + 49 = 98$$

3 Perimeter of the rectangle

$$= (\text{length} + \text{width}) \times 2$$
$$= (8 + 4) \times 2 = 12 \times 2 = 24$$

4 Half of Malik's basket

$$= 6 \div 2 = 3 \text{ figs.}$$

Half of Mazen's basket

$$= 10 \div 2 = 5 \text{ figs.}$$

Half of Mazen's basket is larger.

## Model 2

First:

1 8

2  $\frac{1}{8}$

Second:

1  $36 \div 3 = 12$

2 Estimate:  $10 \times 5 = 50$

Actual result =  $9 \times 5 = 45$

3 Number of all pots that Laila needs =  $24 \div 3 = 8$  pots.

Number of extra pots Laila needs =  $8 - 5 = 3$  pots.

4 3 equal parts.

## Model 3

First:

1 4

2 six

Second:

1 Side length =  $20 \div 4 = 5$  cm.

2 Number of buttons:

$$4 \times 3 \times 2 = 4 \times (3 \times 2)$$

$$= 4 \times 6 = 24 \text{ buttons.}$$

3  $50 = 2 \times 25 = 2 \times (5 \times 5)$

4  $\frac{1}{5}$  is smaller.

**Model 4**

First:

1 2

2  $\frac{3}{8}$

Second:

1 Half of perimeter =  $24 \div 2 = 12$  m

Length =  $12 - 5 = 7$  m

2



3  $4 \times 5 \times 2 = 4 \times (5 \times 2) = 4 \times 10 = 20$

4  $\frac{1}{4}$  is greater than  $\frac{1}{5}$ .



**Model 5**

First:

1 3

2 3

Second:

1 Perimeter of the square

=  $7 \times 4 = 28$  cm

2  $7 \times 4 \times 5 = 7 \times (4 \times 5)$

=  $7 \times 20 = 140$

3 The order:  $\frac{1}{9}$ ,  $\frac{1}{7}$ ,  $\frac{1}{5}$ ,  $\frac{1}{3}$

4  $\frac{1}{6}$

تطبيق



مذكرات جاهزة للطباعة

لتحميل الملفات التعليمية مجاناً للمعلم والطالب

مذكرات وملازم / مراجعات وملخصات / امتحانات / كتب الوزارة /  
أدلة المعلم / دفاتر التحضير / سجلات مدرسية / أوراق تأسيس

امسح الكود بموبايلك علشان تقدر تثبت التطبيق

وتقدر ف أي وقت تحمّل ال نفسك فيه ببلاش

هيغنيك عن البحث والجروبات والقنوات الكثيرة

