

P.4 Mathematics



LESSON ONE WEEK FOUR

TOPIC: OPERATIONS ON WHOLE NUMBERS.

SUB TOPIC: DIVISION OF WHOLE NUMBERS.

A. Using repeated subtraction.

Example 1:

$$6 \div 3 = \quad 6 - 3 = 3 \text{ (1}^{\text{st}} \text{ time)}$$

$$3 - 3 = 0 \text{ (2}^{\text{nd}} \text{ time)}$$

There are 2 groups. $\therefore 6 \div 3 = 2$.

Example 2:

$$9 \div 2 = \quad 9 - 2 = 7 \text{ (1}^{\text{st}} \text{ time)}$$

$$7 - 2 = 5 \text{ (2}^{\text{nd}} \text{ time)}$$

$$5 - 2 = 3 \text{ (3}^{\text{rd}} \text{ time)}$$

$$3 - 2 = 1 \text{ (4}^{\text{th}} \text{ time)}$$

There are 4 groups remainder 1

$\therefore 9 \div 2 = 4 \text{ rem } 1$.

Exercise:

Divide the following numbers using repeated subtraction.

1. $18 \div 6$

4. $17 \div 5$

2. $16 \div 8$

5. $36 \div 9$

3. $24 \div 4$

6. $20 \div 4$

LESSON TWO

TOPIC: OPERATIONS ON WHOLE NUMBERS.

SUB TOPIC: DIVISION OF WHOLE NUMBERS.

B: Using long division:

(Without remainders)

Note: ***Emphasize drawing tables***

Example 1: $24 \div 4$

$$\begin{array}{r} 06 \\ 4 \overline{) 24} \\ 0 \times 4 = \underline{-0} \downarrow \\ 24 \\ 6 \times 4 = \underline{-24} \\ \hline 0 \end{array}$$

$\therefore 24 \div 4 = 6$

Example 2: $54 \div 3$

$$\begin{array}{r} 18 \\ 3 \overline{) 54} \\ 1 \times 3 = \underline{-3} \downarrow \\ 24 \\ 8 \times 3 = \underline{-24} \\ \hline 0 \end{array}$$

$\therefore 54 \div 3 = 18$

Example 3: $627 \div 3$

$$\begin{array}{r} 209 \\ 3 \overline{) 627} \\ 2 \times 3 = \underline{-6} \downarrow \\ 02 \\ 0 \times 3 = \underline{-0} \\ \hline 27 \\ 9 \times 3 = \underline{-27} \\ \hline 0 \end{array}$$

$\therefore 627 \div 3 = 209$

Activity.

Use long division to answer the following;

1. $814 \div 2$
2. $427 \div 7$
3. $584 \div 8$
4. $1488 \div 4$
5. $405 \div 9$
6. $243 \div 3$

LESSON THREE

TOPIC: OPERATIONS ON WHOLE NUMBERS.

SUB TOPIC: DIVISION OF WHOLE NUMBERS.

C. Using long division with remainders

Example 1: $61 \div 5$

$$\begin{array}{r} 12 \\ 5 \overline{) 61} \\ 1 \times 5 = \underline{-5} \downarrow \\ 11 \\ 2 \times 5 = \underline{-10} \\ \hline 1 \end{array}$$

$\therefore 61 \div 5 = 12 \text{ rem } 1$

Example 2: $2491 \div 4$

$$\begin{array}{r} 0622 \\ 4 \overline{) 2491} \\ 0 \times 4 = \underline{-0} \downarrow \\ 24 \\ 6 \times 4 = \underline{-24} \downarrow \\ 09 \\ 2 \times 4 = \underline{-8} \downarrow \\ 11 \\ 2 \times 4 = \underline{-8} \\ \hline 3 \end{array}$$

$\therefore 2491 \div 4 = 622 \text{ r } 3.$

Example 3: $32 \div 7$

$$\begin{array}{r} 04 \\ 7 \overline{) 32} \\ \underline{0 \times 7 = 0} \\ 32 \\ \underline{4 \times 7 = 28} \\ 4 \end{array}$$

$32 \div 7 = 4 \text{ r } 4.$

Activity

Use long division to answer the following;

1. $814 \div 3$
2. $249 \div 6$
3. $427 \div 5$

4. $584 \div 3$
5. $488 \div 4$
6. $243 \div 5$

LESSON FOUR

TOPIC: OPERATIONS ON WHOLE NUMBERS.

SUB TOPIC: DIVISION OF WHOLE NUMBERS.

D: Dividing numbers by 10.

Example 1:

$$\begin{aligned} 4000 \div 10 &= 400\cancel{0} \div 1\cancel{0} \\ &= 400 \div 1 \\ &= 400 \end{aligned}$$

Example 2:

$$\begin{aligned} 680 \div 10 &= 68\cancel{0} \div 1\cancel{0} \\ &= 68 \div 1 \\ &= 68 \end{aligned}$$

Activity:

1. $450 \div 10$
2. $5000 \div 10$
3. $160 \div 10$

4. $970 \div 10$
5. $8000 \div 10$
6. $6000 \div 10$

LESSON FIVE

TOPIC: OPERATIONS ON WHOLE NUMBERS.

SUB TOPIC: DIVISION OF WHOLE NUMBERS.

E: Word problems involving division.

Example 1:

Five boys shared 4500 shillings amongst themselves. How much money did each boy get?

$$5 \text{ boys} = \text{sh. } 4500$$

$$1 \text{ boy} = \text{sh. } (4500 \div 5)$$

Emphasize drawing tables

$$\begin{array}{r} 900 \\ 900 \\ 900 \\ 900 \\ 900 \\ \hline 5 \overline{) 4500} \\ \underline{0} \\ 45 \\ \underline{45} \\ 00 \\ \underline{00} \\ 00 \\ \underline{00} \\ 0 \end{array}$$

\therefore Each boy got sh. 900.

Example 2:

A mother gave out 280 oranges to her 4 sons. How many oranges did each get?

$$4 \text{ sons} = 280 \text{ oranges}$$

$$1 \text{ sons} = (280 \div 4) \text{ oranges.}$$

$$\begin{array}{r} 70 \\ 70 \\ 70 \\ \hline 4 \overline{) 280} \\ \underline{0} \\ 28 \\ \underline{28} \\ 00 \\ \underline{00} \\ 0 \end{array}$$

\therefore Each son got 70 oranges.

Exercise:

1. Share 72 books among 3 pupils.
2. A basket contains 48 apples. If these apples are put in groups of 3, how many groups are made?
3. An employee received sh. 9500 after working for 5 days. How much was he paid for each day?
4. Seventy-two pupils arrived in 8 taxis. If each taxi had the same number of pupils, how many pupils travelled in each taxi?
5. A shop keeper bought 495 oil tins and then packed them into boxes each building 9 tins. How many boxes did he use?
6. A teacher gave out 108 sweets equally to 9 pupils. How many sweets did each pupil receive?