


 CHAPTER-10 | RATIO, PROPORTION  
AND  
UNITARY METHOD

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Date: 21, 05, 20

TOPIC: PROPORTION: If two ratios are equal, we say that they are in proportion and use the symbol '::'.

or '=' to equate the two ratios.

$$\text{e.g. } 25 \text{ cm} : 1 \text{ m} = \frac{25}{100} \text{ m} : 1 \text{ m} = 1 : 4$$

$$\text{and } ₹40 : ₹160 = \frac{40}{160} = 1 : 4$$

Since two ratios are equal, so we can write it

$$\text{as } 25 \text{ cm} : 1 \text{ m} = ₹40 : ₹160$$

$$\Rightarrow 25 : 100 = 40 : 160$$

$$\Rightarrow 25 : 100 :: 40 : 160$$

Here 1st and 4th terms are called extremes terms and 2nd and 3rd terms are called middle terms or means.

Also, if the 4 terms are in a proportion, then

Product of extremes = Product of means

$$\text{e.g. } 4 : 6 :: 8 : 12$$

$$\text{Product of extremes} = 4 \times 12 = 48$$

$$\text{Product of means} = 6 \times 8 = 48$$

So, we can say that given terms are in a proportion.

Note:- Study the rules and examples carefully and solve the given questions in your notebook.

Q1 Determine the given numbers are in a proportion:

(i) 22, 33, 42, 63      (ii) 150, 200, 250, 300

Q2 Verify the following:

(i)  $60 : 105 :: 84 : 147$       (ii)  $39 : 65 :: 141 : 235$

Q3 Find the value of  $x$  in given proportions.

(i)  $55 : 11 :: x : 6$       (ii)  $x : 92 :: 87 : 116$

one solved example:  $51 : 85 :: 57 : x$

$$\Rightarrow 51 \times x = 85 \times 57$$

$$\Rightarrow x = \frac{85 \times 57}{51} = 95$$

= Product of extremes  
= Product of means

Q4 Write True or False

(i)  $51 : 68 :: 85 : 102$       (ii)  $81 \text{ kg} : 45 \text{ kg} :: 18 \text{ men} : 10 \text{ men}$

Q5 Determine if the ratios form a proportion.

(i)  $39 \text{ l} : 65 \text{ l}$  and  $6 \text{ bottles} : 10 \text{ bottles}$       (ii)  $2 \text{ kg} : 80 \text{ kg}$  and  $25 \text{ g} : 625 \text{ g}$

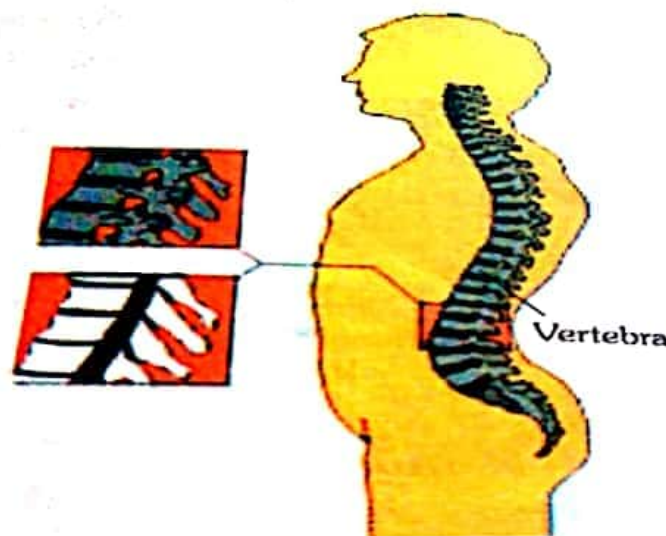
## Chapter- Body movements

Various organs of the skeletal system

### Back bone-

The backbone is a long hollow, rod like structure running from the neck to the hip, inside our body. The scientific name of backbone is vertebral column. Backbone is not a single bone, it is made up 33 small bones placed one over other. The small bones which make up backbone are called vertebrae. Between the various vertebrae of backbone are the discs of cartilage (soft bone)

The first 24 vertebrae are joined serially by elastic like cartilages. The 5 vertebrae of the hip are fuse and inseparable. 4 vertebrae of



**The backbone**

the tail are also fused. Scanned with CamScanner

### Main functions of the Backbone

- 1 Backbone provide main support to the body.
- 2 It supports the head its top.
- 3 It attaches shoulder bones, rib and hip bone.
- 4 It protect the spinal cord.

**Learn and write in fair notebook.**

# English H.W

## L&W

Q2. Where did Enola think the flowers had been grown? Why were they grown there?  
Ans. Enola met his friend Mrs. Watson. She saw many flowers had been grown there. They grown there because many flowers do conside one. They taught us people are so kind.

Q3. 'These Significance chilled me.' What emotion did Enola experience? What was the significance of the blossoms? Why did that chill Enola?

Ans. Enola said that she had never seen this type of bouquet before. If the greens were bizarre, the blossoms were worse; their significance chilled her. The significance of the blossoms were very unpleasant, sometimes they had made people very ~~sad~~ sad. They chilled Enola because hawthorn was a shrub which brings a powerful symbol of bad luck.

Q4. Why does the author say that the flowers had come from 'quite a twisted mind'?

Ans. The author says that the flowers had come from 'quite a twisted mind' because they had brought calamities and disasters sometimes. They seemed ominous according to the author.

# Hindi H.W L&W

DATE: / /

प्रश्न 6. नारायण दास कौन था ? उसे महंत ने कहाँ भेजा ?

उत्तर- नारायण दास महंत गुरु का चेला था। उसे महंत ने पूरब की ओर भिक्षा लेने के लिए भेजा।

प्रश्न 7. नगरी का नाम और राजा का नाम सुनकर गौवर्धन दास ने क्या कविता बनाई ?

उत्तर- अंधेर नगरी, चौपट राजा। टके सैर आजी, टके सैर खाजा।

प्रश्न 8. महंत और राजा के चरित्र की दो-दो विशेषताएँ लिखिए।

उत्तर- महंत विद्वान और सभ्य था। राजा मूर्ख और अन्यायी था।

प्रश्न 9. महंत जी अंधेर नगरी में एक मिनट भी क्यों नहीं रहे ? गौवर्धन दास वहाँ क्यों रह गया ?

उत्तर- महंत जी के अनुसार ऐसी नगरी में रहना ठीक नहीं, जहाँ टके सैर सबजी और टके सैर खाजा बिकता है। इसीलिए वह अंधेर नगरी में एक मिनट भी नहीं रहे। गौवर्धन दास ने सोचा यहाँ भिक्षा भी अच्छी मिलती है और सब कुछ सस्ता भी है। मौज करूँगे। इसीलिए वह वहाँ रह गया।

Class -6th Sub.-SST  
Read passage  
carefully and write a  
note on Dr. Bhim Rao  
Ambedkar in fair  
notebook (words limit  
50-80)

2020-21

20 / Social and Political Life



underwent a sudden change. We could see that he was overpowered by a strange feeling of repulsion. As soon as he heard my reply, he went away to his room and we stood where we were. Fifteen to twenty minutes elapsed; the sun was almost setting. Our father had not turned up nor had he sent his servant, and now the stationmaster had also left us. We were quite bewildered, and the joy and happiness, which we felt at the beginning of the journey, gave way to a feeling of extreme sadness.

After half an hour the stationmaster returned and asked us what we proposed to do. We said that if we could get a bullock-cart on hire we would go to Koregaon, and if it was not very far we would like to start straightway. There were many bullock-carts plying for hire. But my reply to the station master that we were Mahars had gone round among the cart men and not one of them was prepared to suffer being polluted and to demean himself carrying passengers of the untouchable classes. We were prepared to pay double the fare but we found that money did not work. The stationmaster, who was negotiating on our

behalf, stood silent, not knowing what to do.

Source: Dr B. R. Ambedkar, Writings and Speeches, Volume 12, Edited Vasant Moon, Bombay Education Department, Govt. of Maharashtra.

Dr Bhim Rao Ambedkar (1891-1956) is considered the father of the Indian Constitution and is also the best known leader of the Dalits. Dr Ambedkar fought for the rights of the Dalit community. He was born into the Mahar caste, which was considered untouchable. The Mahars were poor, owned no land and children born to them also had to do the work their parents did. They lived in spaces outside the main village and were not allowed into the village.

Dr Ambedkar was the first person from his caste who completed his college education and went to England to become a lawyer. He encouraged Dalits to send their children to school and college. He also urged Dalits to take on different kinds of government jobs in order to move out of the caste system. He led many efforts of Dalits to gain entry into temples. Later in life he converted to Buddhism in his search for a religion that treated all members equally.

Dr Ambedkar believed that Dalits must fight the caste system and work towards a society based on respect not just for a few but for all persons.

