

**CLASS NOTES-ANSWERS****Exercise 3.2**

1. Draw the factor tree of the following.

a. 48

b. 86

c. 100

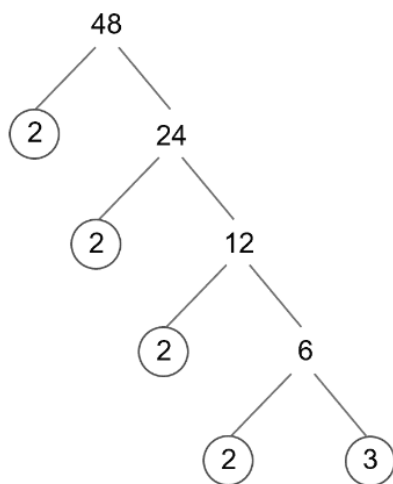
d. 145

e. 196

f. 234

Answer:

a.  $48 = 2 \times 2 \times 2 \times 2 \times 3$

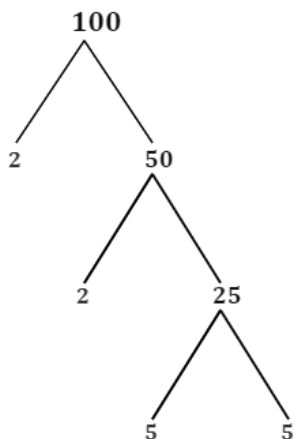


b.  $86 = 2 \times 43$

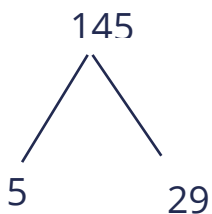


c.  $100 = 2 \times 2 \times 5 \times 5$

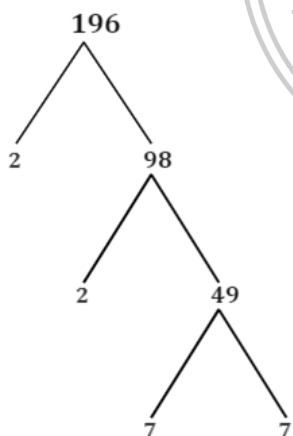




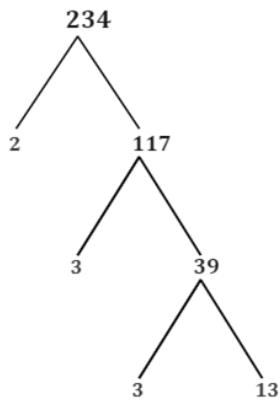
d.  $145 = 5 \times 29$



e.  $196 = 2 \times 2 \times 7 \times 7$



f.  $234 = 2 \times 3 \times 3 \times 13$



2. Find the prime factorisations of the following numbers.

- a. 36                      b. 54                      c. 96                      d. 125  
 e. 255                      f. 282

Answer:

- a.  $36 = 2 \times 2 \times 3 \times 3$   
 b.  $54 = 2 \times 3 \times 3 \times 3$   
 c.  $96 = 2 \times 2 \times 2 \times 2 \times 2 \times 3$   
 d.  $125 = 5 \times 5 \times 5$   
 e.  $255 = 3 \times 5 \times 17$   
 f.  $282 = 2 \times 3 \times 47$



3. Check if the following numbers are coprime or not.

- a. 12 and 15                      b. 19 and 21                      c. 25 and 29  
 d. 48 and 35                      e. 45 and 54                      f. 50 and 51

Answer:

- a. 12 and 15 are not coprime numbers.  
 b. 19 and 21 are coprime numbers.  
 c. 25 and 29 are coprime numbers.



- d. 48 and 35 are coprime numbers.
- e. 45 and 54 are not coprime numbers.
- f. 50 and 51 are coprime numbers.

