

Worksheet

- Chose the correct option.
 - Which ratio is the same as $2\frac{4}{5} : 5\frac{5}{6}$?
 - 12 : 25
 - 12 : 5
 - 6 : 25
 - 245 : 15
 - The mean proportional between 2.1 and 8.4 is
 - 2.1
 - 4.2
 - 6.3
 - 3.6
 - The third proportional to $5\frac{3}{5}$ and $4\frac{2}{3}$ is _____.
 - $6\frac{18}{25}$
 - $8\frac{1}{3}$
 - $3\frac{8}{9}$
 - $\frac{5}{6}$
- Fill in the blanks.
 - The simplest form of the ratio $\frac{2}{5} : \frac{4}{15}$ is _____.
 - $2 : 3$ _____ $4 : 5$ ($>$ or $<$)
- Express the following ratios in the simplest form:
 - $\frac{1}{6} : \frac{1}{8} : \frac{1}{16}$
 - $3\frac{2}{3} : 3\frac{1}{2} : 1\frac{5}{6}$
- Which ratio is smaller?
 - $2\frac{1}{7} : 3\frac{2}{5}$ or $3\frac{1}{7} : 4\frac{2}{5}$
 - $\frac{1}{8} : \frac{1}{5}$ or $\frac{1}{9} : \frac{1}{4}$
- Two small rods whose lengths are in the ratio 8 : 9 are joined to make a rod of length 85 cm. Find the lengths of the small rod.
- A log is broken into two parts in the ratio 3 : 10 lengthwise. One part is 35 cm more than the other part. Find the length of each part and the length of the log.
- A man has a monthly income of ₹ 7500. His monthly expenditure is ₹ 5250 and he puts the rest of the money in a savings bank account. Find the ratio between his
 - income and expenditure.
 - income and savings.
 - expenditure and savings.
- The angles of a triangle are in the ratio 3 : 2 : 4. Find the largest angle and the smallest angle of the triangle.
 - The two angles of a linear pair are in the ratio 2 : 3. Find the angles.
- Check whether the following quantities are in proportion or not:
 - 12, 15, 20, 30
 - $\frac{7}{9}, \frac{4}{5}, \frac{7}{12}, \frac{3}{5}$
- Find the mean proportional between the given pair of numbers:
 - $\frac{5}{12}$ and $\frac{20}{27}$
 - 0.08, 0.18

11. Find the third proportional to the following:
 - a. 16, 20
 - b. $1\frac{3}{4}, 2\frac{1}{2}$
12. The ratio between the ages of a mother to daughter is 9 : 2. If the daughter is 5 years 4 months old, what is the mother's age?
13. Find the value of x in the following:
 - a. $16 : x :: 24 : 21$
 - b. $\frac{2}{15} : \frac{1}{6} :: x : \frac{5}{12}$
 - c. $x : 0.4 :: 0.15 : 0.03$
 - d. $4 : 15 :: 168 : x$
14. Write true or false:
 - a. $18 : 7 = 72 : 33$
 - b. $11 : 15 < 13 : 17$
 - c. If a, b, c and d are in proportion, then $ab = cd$.
 - d. The mean proportional between p and q is pq .
 - e. If $mn = op$, then n, p, o and m are in proportion.
15. Leela read 132 pages of a book. The ratio between the number of pages read and the number of pages yet to be read is 3 : 8. Find the total number of pages of the book?

Answers to Worksheet

- | | | | |
|-------------------------------------|--------------------------------|-----------------|------------------------|
| 1. a. i | b. ii | c. iii | |
| 2. a. 3 : 2 | b. < | 3. a. 8 : 6 : 3 | b. 22 : 21 : 11 |
| 4. a. $2\frac{1}{7} : 3\frac{2}{5}$ | b. $\frac{1}{9} : \frac{1}{4}$ | | |
| 5. 40 cm | 6. 15 cm, 50 cm, 65 cm | | |
| 7. a. 10 : 7 | b. 10 : 3 | c. 7 : 3 | |
| 8. a. 80°, 40° | b. 72°, 108° | 9. a. No | b. Yes, in proportion. |
| 10. a. $\frac{5}{9}$ | b. 0.12 | 11. a. 25 | b. $\frac{25}{7}$ |
| 12. 24 years | | | |
| 13. a. 14 | b. $\frac{1}{3}$ | c. 2 | d. 630 |
| 14. a. False | b. True | c. False | d. False e. True |
| 15. 484 pages | | | |