EduSahara™ Assignment

Name : Ratio Types

Chapter : Ratio

Grade : ICSE Grade X

1. Find the duplicate of the given ratio $20:15$ =

   (i) $401:225$ (ii) $399:225$ (iii) $400:228$ (iv) $400:223$ (v) $400:225$

2. Find the sub-duplicate of the given ratio $36:49$ =

   (i) $6:7$ (ii) $6:10$ (iii) $6:5$ (iv) $5:7$ (v) $7:7$

3. Find the triplicate of the given ratio $5:16$ =

   (i) $126:4096$ (ii) $125:4094$ (iii) $124:4096$ (iv) $125:4096$ (v) $125:4098$

4. Find the sub-triplicate of the given ratio $6859:512$ =

   (i) $19:6$ (ii) $18:8$ (iii) $19:8$ (iv) $19:10$ (v) $20:8$

5. Find the compound ratio of $13:8$ and $19:14$

   (i) $247:115$ (ii) $248:112$ (iii) $247:112$ (iv) $247:109$ (v) $246:112$

6. If $(x+21):48$ is the duplicate ratio of $5:4$, find the value of x

   (i) 56 (ii) 55 (iii) 53 (iv) 51 (v) 54

7. If $(x+14):54$ is the sub-duplicate ratio of $64:36$, find the value of x

   (i) 59 (ii) 57 (iii) 56 (iv) 61 (v) 58

8. If $250:(3x+123)$ is the triplicate ratio of $5:9$, find the value of x

   (i) 444 (ii) 443 (iii) 446 (iv) 445 (v) 448

9. If $(x+7):63$ is the sub-triplicate ratio of $729:343$, find the value of x

   (i) 71 (ii) 77 (iii) 75 (iv) 74 (v) 73

10. Find the compounded ratio of the duplicate ratio of $18:8$, the reciprocal ratio of $16:13$ and the sub-duplicate ratio of $9:324$

    (i) $351:510$ (ii) $351:512$ (iii) $350:512$ (iv) $351:515$ (v) $352:512$

11. Find the duplicate ratio of $v:w$

    (i) $v^2:w^2$ (ii) $\sqrt{v}:\sqrt{w}$ (iii) $\sqrt[3]{v}:\sqrt[3]{w}$ (iv) $v^3:w^3$

12. Find the triplicate ratio of $n:z$

    (i) $\sqrt{n}:\sqrt{z}$ (ii) $n^2:z^2$ (iii) $n^3:z^3$ (iv) $\sqrt[3]{n}:\sqrt[3]{z}$

13. Find the sub-duplicate ratio of $y:r$

    (i) $\sqrt[3]{y}:\sqrt[3]{r}$ (ii) $\sqrt{y}:\sqrt{r}$ (iii) $y^3:r^3$ (iv) $y^2:r^2$

14. Find the sub-triplicate ratio of $x : n$

(i) $x^2 : n^2$ (ii) $x^3 : n^3$ (iii) $\sqrt[3]{x} : \sqrt[3]{n}$ (iv) $\sqrt{x} : \sqrt{n}$

15. Find the compounded ratio of $r : b$ and $n : f$

(i) $rn : bf$ (ii) $b : nf$ (iii) $n : rb$ (iv) $rb : nf$ (v) $fn : rb$

Assignment Key

1) (v)	2) (i)	3) (iv)	4) (iii)	5) (iii)	6) (v)
7) (v)	8) (iv)	9) (iv)	10) (ii)	11) (i)	12) (iii)
13) (ii)	14) (iii)	15) (i)			