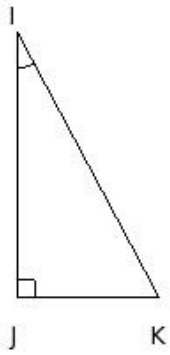
EduSahara™ Assignment

Name : Basics of Trigonometric Ratios

Chapter : Trigonometrical Ratios

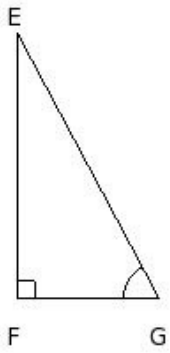
Grade : ICSE Grade IX

1. In the given figure, $\sin I$ =



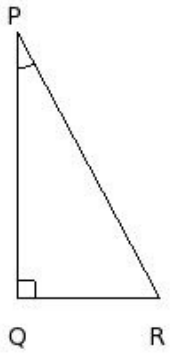
(i) $\frac{LK}{LJ}$ (ii) $\frac{JK}{JI}$ (iii) $\frac{IJ}{KJ}$ (iv) $\frac{KJ}{IJ}$ (v) $\frac{JK}{IK}$

2. In the given figure, $\cos G$ =



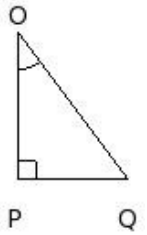
(i) $\frac{FG}{EG}$ (ii) $\frac{EG}{EF}$ (iii) $\frac{GE}{GF}$ (iv) $\frac{HG}{HF}$ (v) $\frac{FG}{FE}$

3. In the given figure, $\tan P$ =



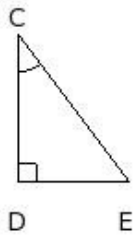
(i) $\frac{RQ}{PR}$ (ii) $\frac{SR}{RQ}$ (iii) $\frac{PQ}{RP}$ (iv) $\frac{QR}{RP}$ (v) $\frac{QR}{PQ}$

4. In the given figure, $\cot O$ =



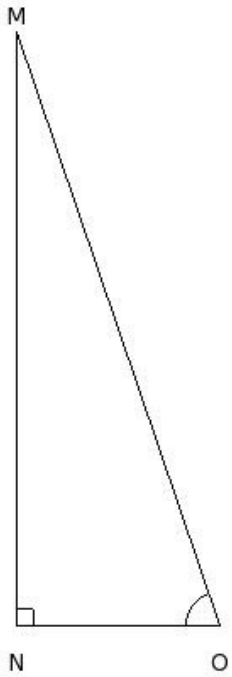
(i) $\frac{QO}{OP}$ (ii) $\frac{QP}{RQ}$ (iii) $\frac{QO}{PQ}$ (iv) $\frac{OP}{PQ}$ (v) $\frac{OQ}{QP}$

5. In the given figure, $\sec C$ =



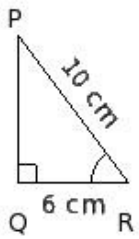
(i) $\frac{ED}{EC}$ (ii) $\frac{DC}{EC}$ (iii) $\frac{CD}{CE}$ (iv) $\frac{FD}{ED}$ (v) $\frac{CE}{CD}$

6. In the given figure, $\operatorname{cosec} O$ =



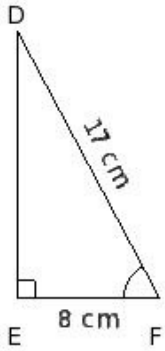
(i) $\frac{PN}{ON}$ (ii) $\frac{MO}{MN}$ (iii) $\frac{ON}{MN}$ (iv) $\frac{NM}{OM}$ (v) $\frac{MN}{ON}$

7. In the given figure, $\sin R$ =



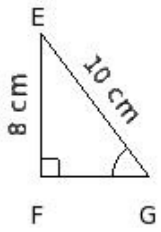
(i) $\frac{4}{3}$ (ii) $\frac{4}{7}$ (iii) $\frac{4}{5}$ (iv) $\frac{2}{5}$ (v) $\frac{6}{5}$

8. In the given figure, $\cos F$ =



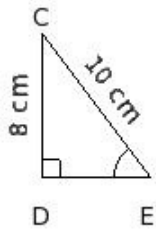
(i) $\frac{8}{19}$ (ii) $\frac{6}{17}$ (iii) $\frac{10}{17}$ (iv) $\frac{8}{17}$ (v) $\frac{8}{15}$

9. In the given figure, $\tan G$ =



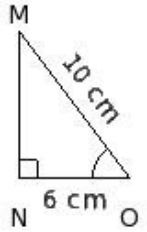
(i) $\frac{4}{3}$ (ii) 2 (iii) $\frac{4}{5}$ (iv) $\frac{2}{3}$ (v) 4

10. In the given figure, $\cot E$ =



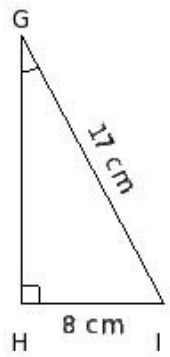
(i) $\frac{5}{4}$ (ii) $\frac{1}{2}$ (iii) $\frac{3}{4}$ (iv) $\frac{1}{4}$ (v) $\frac{3}{2}$

11. In the given figure, $\sec O$ =



(i) 5 (ii) $\frac{5}{3}$ (iii) 1 (iv) $\frac{7}{3}$

12. In the given figure, $\operatorname{cosec} G =$



(i) $\frac{19}{8}$ (ii) $\frac{17}{10}$ (iii) $\frac{15}{8}$ (iv) $\frac{17}{8}$ (v) $\frac{17}{6}$

13. $\sin B =$

(i) $\frac{1}{\operatorname{cosec} B}$ (ii) $\frac{1}{\cos B}$ (iii) $\frac{1}{\tan B}$ (iv) $\frac{1}{\sec B}$ (v) $\frac{1}{\cot B}$

14. $\cos F =$

(i) $\frac{1}{\tan F}$ (ii) $\frac{1}{\cot F}$ (iii) $\frac{1}{\operatorname{cosec} F}$ (iv) $\frac{1}{\sin F}$ (v) $\frac{1}{\sec F}$

15. $\tan D =$

(i) $\frac{1}{\cos D}$ (ii) $\frac{1}{\cot D}$ (iii) $\frac{1}{\sin D}$ (iv) $\frac{1}{\sec D}$ (v) $\frac{1}{\operatorname{cosec} D}$

16. $\cot M =$

(i) $\frac{1}{\tan M}$ (ii) $\frac{1}{\cos M}$ (iii) $\frac{1}{\sec M}$ (iv) $\frac{1}{\operatorname{cosec} M}$ (v) $\frac{1}{\sin M}$

17. $\sec M =$

(i) $\frac{1}{\cot M}$ (ii) $\frac{1}{\tan M}$ (iii) $\frac{1}{\cos M}$ (iv) $\frac{1}{\operatorname{cosec} M}$ (v) $\frac{1}{\sin M}$

18. $\operatorname{cosec} C =$

(i) $\frac{1}{\sin C}$ (ii) $\frac{1}{\tan C}$ (iii) $\frac{1}{\cos C}$ (iv) $\frac{1}{\sec C}$ (v) $\frac{1}{\cot C}$

19. In $\triangle FGH$, right angled at G, if FG = 24 cm and GH = 10 cm, find $\sin H$

(i) $\frac{10}{13}$ (ii) $\frac{4}{5}$ (iii) $\frac{12}{11}$ (iv) $\frac{12}{13}$ (v) $\frac{14}{13}$

20. In $\triangle HIJ$, right angled at I, if HI = 15 cm and IJ = 8 cm, find cos J

(i) $\frac{10}{17}$ (ii) $\frac{6}{17}$ (iii) $\frac{8}{17}$ (iv) $\frac{8}{15}$ (v) $\frac{8}{19}$

21. In $\triangle EFG$, right angled at F, if EF = 8 cm and FG = 6 cm, find tan G

(i) 4 (ii) $\frac{4}{5}$ (iii) $\frac{4}{3}$ (iv) $\frac{2}{3}$ (v) 2

22. In $\triangle FGH$, right angled at G, if FG = 35 cm and GH = 12 cm, find cot H

(i) $\frac{12}{37}$ (ii) $\frac{2}{7}$ (iii) $\frac{12}{35}$ (iv) $\frac{4}{11}$ (v) $\frac{2}{5}$

23. In $\triangle BCD$, right angled at C, if BC = 35 cm and CD = 12 cm, find sec B

(i) 1 (ii) $\frac{37}{33}$ (iii) $\frac{39}{35}$ (iv) $\frac{37}{35}$

24. In $\triangle FGH$, right angled at G, if FG = 15 cm and GH = 8 cm, find cosec F

(i) $\frac{17}{6}$ (ii) $\frac{19}{8}$ (iii) $\frac{17}{10}$ (iv) $\frac{17}{8}$ (v) $\frac{15}{8}$

Assignment Key

1) (v)	2) (i)	3) (v)	4) (iv)	5) (v)	6) (ii)
7) (iii)	8) (iv)	9) (i)	10) (iii)	11) (ii)	12) (iv)
13) (i)	14) (v)	15) (ii)	16) (i)	17) (iii)	18) (i)
19) (iv)	20) (iii)	21) (iii)	22) (iii)	23) (iv)	24) (iv)