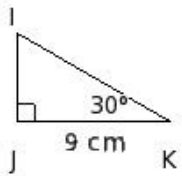


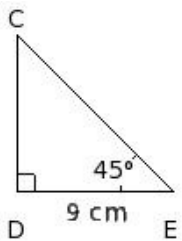


1. In the given figure,  $\triangle IJK$  is right angled at J. If  $JK = 9$  cm and  $\angle K = 30^\circ$ , find IJ and IK



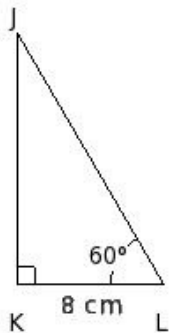
- (i)  $3\sqrt{3}$  cm & 18 cm (ii)  $3\sqrt{3}$  cm & 21 cm (iii)  $3\sqrt{3}$  cm &  $6\sqrt{3}$  cm (iv)  $3\sqrt{3}$  cm &  $6\sqrt{3}$  cm (v) 3 cm & 21 cm

2. In the given figure,  $\triangle CDE$  is right angled at D. If  $DE = 9$  cm and  $\angle E = 45^\circ$ , find CD and CE



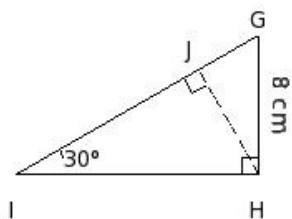
- (i) 10 cm & 18 cm (ii) 9 cm &  $9\sqrt{2}$  cm (iii) 10 cm &  $9\sqrt{2}$  cm (iv) 8 cm & 21 cm (v) 10 cm & 21 cm

3. In the given figure,  $\triangle JKL$  is right angled at K. If  $KL = 8$  cm and  $\angle L = 60^\circ$ , find JK and JL



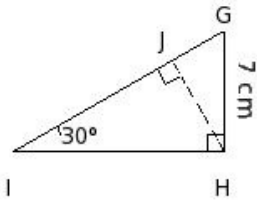
- (i)  $8\sqrt{3}$  cm & 18 cm (ii)  $8\sqrt{3}$  cm & 16 cm (iii)  $8\sqrt{3}$  cm & 18 cm (iv)  $8\sqrt{3}$  cm & 15 cm (v)  $8\sqrt{3}$  cm & 16 cm

4. In the given figure,  $\triangle GIH$  is right angled at H. If  $GH = 8$  cm and  $\angle I = 30^\circ$ , find GI



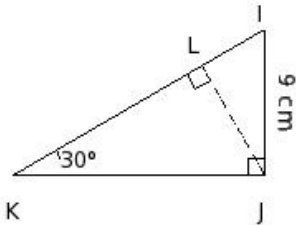
- (i) 13 cm (ii) 15 cm (iii) 18 cm (iv) 16 cm (v) 17 cm

5. In the given figure,  $\triangle GIH$  is right angled at H. If  $GH = 7$  cm and  $\angle I = 30^\circ$ , find HI



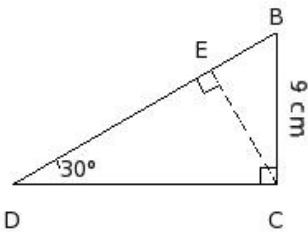
- (i) 7 cm (ii) 21 cm (iii)  $7\sqrt{18}$  cm (iv)  $7\sqrt{3}$  cm (v)  $\frac{21}{2}\sqrt{2}$  cm

6. In the given figure,  $\triangle IKJ$  is right angled at J. If  $IJ = 9$  cm and  $\angle K = 30^\circ$ , find IL



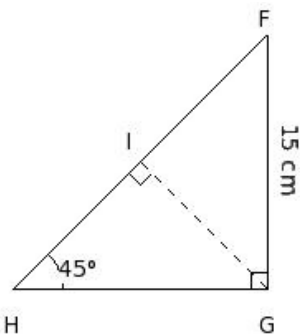
- (i)  $\frac{11}{2}$  cm (ii)  $\frac{17}{4}$  cm (iii)  $\frac{7}{2}$  cm (iv)  $\frac{9}{2}$  cm (v) 5 cm

7. In the given figure,  $\triangle BDC$  is right angled at C. If  $BC = 9$  cm and  $\angle D = 30^\circ$ , find DE



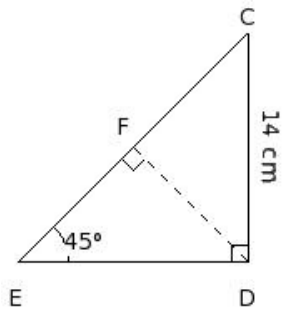
- (i)  $\frac{25}{2}$  cm (ii)  $\frac{27}{4}$  cm (iii) 27 cm (iv)  $\frac{27}{2}$  cm (v)  $\frac{29}{2}$  cm

8. In the given figure,  $\triangle FHG$  is right angled at G. If  $FG = 15$  cm and  $\angle H = 45^\circ$ , find FH



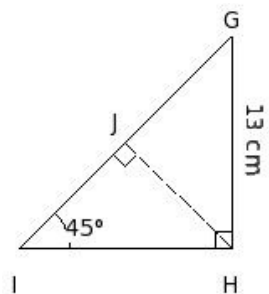
- (i)  $30\sqrt{3}$  cm (ii)  $15\sqrt{2}$  cm (iii) 30 cm (iv)  $\frac{15}{2}\sqrt{12}$  cm (v) 15 cm

9. In the given figure,  $\triangle CED$  is right angled at D. If  $CD = 14$  cm and  $\angle E = 45^\circ$ , find DE



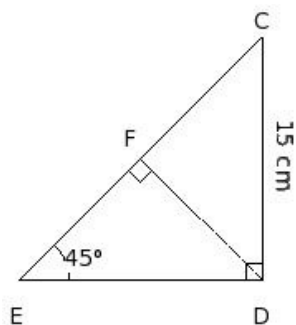
- (i) 12 cm (ii) 15 cm (iii) 14 cm (iv) 16 cm (v) 13 cm

10. In the given figure,  $\triangle GIH$  is right angled at H. If  $GH = 13$  cm and  $\angle I = 45^\circ$ , find GJ



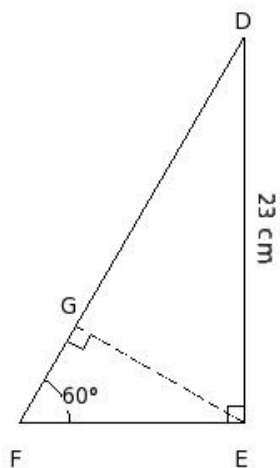
- (i)  $\frac{13}{2}$  cm (ii)  $13\sqrt{3}$  cm (iii)  $\frac{13}{4}\sqrt{12}$  cm (iv) 13 cm (v)  $\frac{13}{2}\sqrt{2}$  cm

11. In the given figure,  $\triangle CED$  is right angled at D. If  $CD = 15$  cm and  $\angle E = 45^\circ$ , find EF



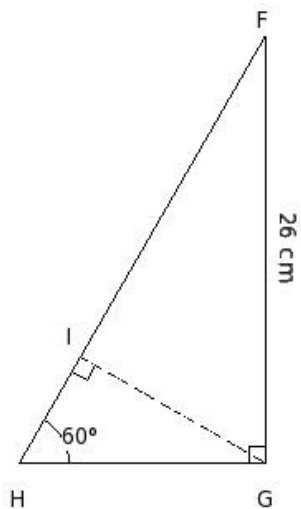
- (i)  $\frac{15}{2}\sqrt{2}$  cm (ii)  $15\sqrt{3}$  cm (iii)  $\frac{15}{4}\sqrt{12}$  cm (iv) 15 cm (v)  $\frac{15}{2}$  cm

12. In the given figure,  $\triangle DFE$  is right angled at E. If  $DE = 23$  cm and  $\angle F = 60^\circ$ , find DF



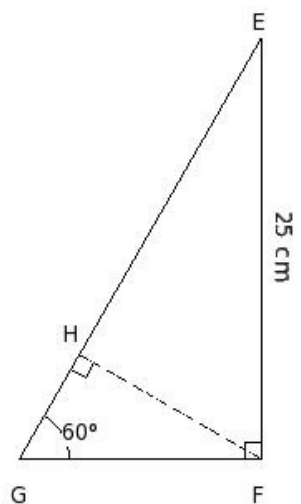
- (i) 46 cm (ii)  $\frac{46}{3}\sqrt{18}$  cm (iii)  $\frac{46}{3}$  cm (iv)  $23\sqrt{2}$  cm (v)  $\frac{46}{3}\sqrt{3}$  cm

13. In the given figure,  $\triangle FHG$  is right angled at G. If  $FG = 26$  cm and  $\angle H = 60^\circ$ , find GH



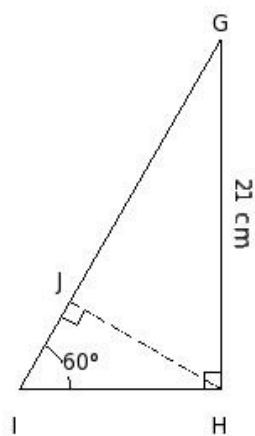
- (i)  $\frac{26}{3}$  cm (ii)  $13\sqrt{2}$  cm (iii) 26 cm (iv)  $\frac{26}{3}\sqrt{18}$  cm (v)  $\frac{26}{3}\sqrt{3}$  cm

14. In the given figure,  $\triangle EGF$  is right angled at F. If  $EF = 25$  cm and  $\angle G = 60^\circ$ , find EH



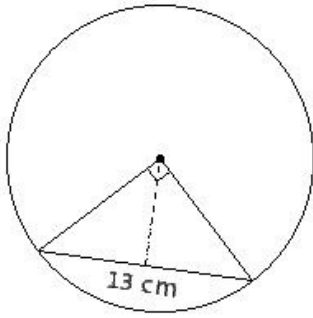
- (i)  $\frac{25}{2}\sqrt{18}$  cm (ii)  $\frac{75}{4}\sqrt{2}$  cm (iii)  $\frac{75}{2}$  cm (iv)  $\frac{25}{2}\sqrt{3}$  cm (v)  $\frac{25}{2}$  cm

15. In the given figure,  $\triangle GIH$  is right angled at H. If  $GH = 21$  cm and  $\angle I = 60^\circ$ , find IJ



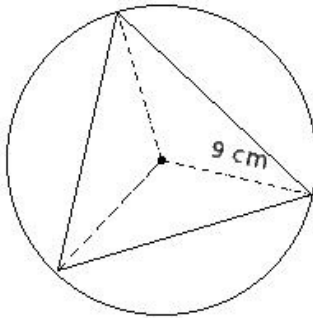
- (i)  $\frac{7}{2}\sqrt{18}$  cm (ii)  $\frac{7}{2}\sqrt{3}$  cm (iii)  $\frac{7}{2}$  cm (iv)  $\frac{21}{2}$  cm (v)  $\frac{21}{4}\sqrt{2}$  cm

16. A chord of 13 cm subtends an angle of  $90^\circ$  at the centre. Calculate its shortest distance from the centre



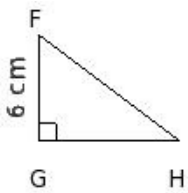
- (i) 5.5 cm (ii) 6.5 cm (iii) 8.5 cm (iv) 4.5 cm (v) 7.5 cm

17. An equilateral triangle is inscribed in a circle of radius 9 cm. Find the length of its sides.



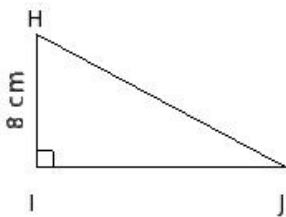
- (i)  $\frac{27}{2}\sqrt{2}$  cm (ii)  $9\sqrt{18}$  cm (iii) 9 cm (iv) 27 cm (v)  $9\sqrt{3}$  cm

18. In the given figure, if  $FH - GH = 2$  cm, and  $FG = 6$  cm, find  $\sin F$



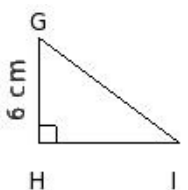
- (i)  $\frac{4}{5}$  (ii)  $\frac{2}{5}$  (iii)  $\frac{4}{7}$  (iv)  $\frac{6}{5}$  (v)  $\frac{4}{3}$

19. In the given figure, if  $HJ - IJ = 2$  cm, and  $HI = 8$  cm, find  $\cos H$



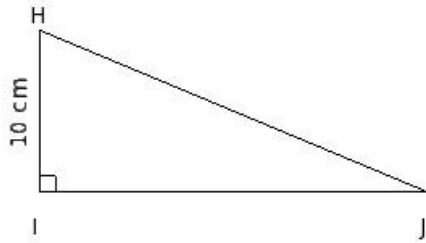
- (i)  $\frac{8}{15}$  (ii)  $\frac{8}{17}$  (iii)  $\frac{6}{17}$  (iv)  $\frac{10}{17}$  (v)  $\frac{8}{19}$

20. In the given figure, if  $GI - HI = 2$  cm, and  $GH = 6$  cm, find  $\tan G$



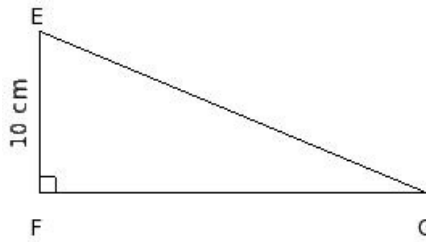
- (i)  $\frac{4}{3}$  (ii) 2 (iii)  $\frac{4}{5}$  (iv)  $\frac{2}{3}$  (v) 4

21. In the given figure, if  $HJ + IJ = 50$  cm, and  $HI = 10$  cm, find  $\sin H$



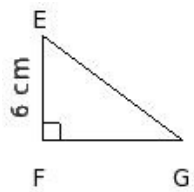
- (i)  $\frac{10}{13}$  (ii)  $\frac{14}{13}$  (iii)  $\frac{12}{13}$  (iv)  $\frac{4}{5}$  (v)  $\frac{12}{11}$

22. In the given figure, if  $EG + FG = 50$  cm, and  $EF = 10$  cm, find  $\cos E$



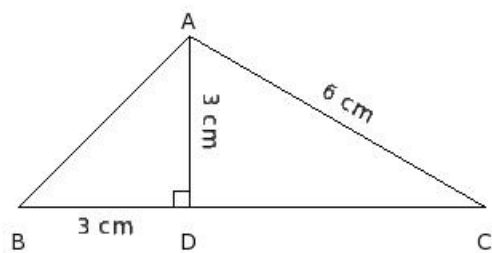
- (i)  $\frac{3}{13}$  (ii)  $\frac{7}{13}$  (iii)  $\frac{5}{11}$  (iv)  $\frac{1}{3}$  (v)  $\frac{5}{13}$

23. In the given figure, if  $EG + FG = 18$  cm, and  $EF = 6$  cm, find  $\tan E$



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

24. The altitude  $AD$  of  $\triangle ABC$  in which  $\angle A$  is obtuse is 3 cm. If  $BD = 3$  cm and  $CD = 3\sqrt{3}$  cm, find  $\angle BAC$



- (i)  $105^\circ$  (ii)  $100^\circ$  (iii)  $110^\circ$  (iv)  $120^\circ$  (v)  $115^\circ$

## Assignment Key

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