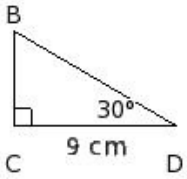


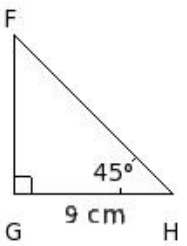


1. In the given figure, $\triangle BCD$ is right angled at C. If $CD = 9$ cm and $\angle D = 30^\circ$, find BC and BD



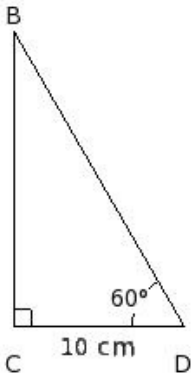
- (i) 3 cm & 20 cm (ii) $3\sqrt{3}$ cm & 20 cm (iii) $3\sqrt{3}$ cm & $6\sqrt{3}$ cm (iv) $3\sqrt{3}$ cm & $6\sqrt{3}$ cm (v) $3\sqrt{3}$ cm & 18 cm

2. In the given figure, $\triangle FGH$ is right angled at G. If $GH = 9$ cm and $\angle H = 45^\circ$, find FG and FH



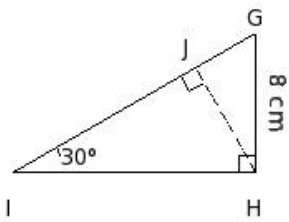
- (i) 10 cm & 18 cm (ii) 10 cm & $9\sqrt{2}$ cm (iii) 10 cm & 20 cm (iv) 9 cm & $9\sqrt{2}$ cm (v) 7 cm & 20 cm

3. In the given figure, $\triangle BCD$ is right angled at C. If $CD = 10$ cm and $\angle D = 60^\circ$, find BC and BD



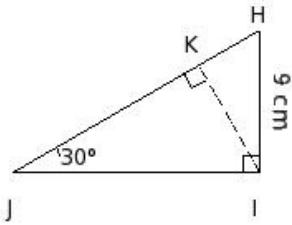
- (i) $10\sqrt{3}$ cm & 19 cm (ii) $10\sqrt{3}$ cm & 20 cm (iii) $10\sqrt{3}$ cm & 20 cm (iv) 10 cm & 22 cm (v) $10\sqrt{3}$ cm & 22 cm

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



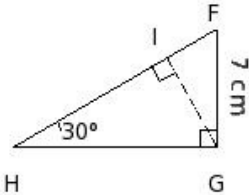
- (i) 19 cm (ii) 13 cm (iii) 17 cm (iv) 16 cm (v) 15 cm

5. In the given figure, $\triangle HJI$ is right angled at I. If $HI = 9$ cm and $\angle J = 30^\circ$, find IJ



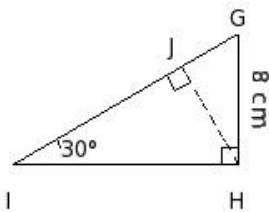
- (i) $\frac{27}{2}\sqrt{2}$ cm (ii) 27 cm (iii) $9\sqrt{3}$ cm (iv) $9\sqrt{18}$ cm (v) 9 cm

6. In the given figure, $\triangle FHG$ is right angled at G. If $FG = 7$ cm and $\angle H = 30^\circ$, find FI



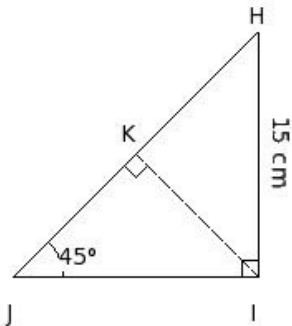
- (i) $\frac{5}{2}$ cm (ii) $\frac{9}{2}$ cm (iii) $\frac{13}{4}$ cm (iv) $\frac{7}{2}$ cm (v) 4 cm

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



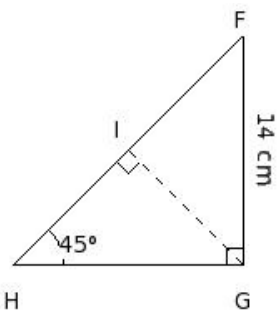
- (i) 13 cm (ii) 10 cm (iii) 12 cm (iv) 11 cm (v) 14 cm

8. In the given figure, $\triangle HJI$ is right angled at I. If $HI = 15$ cm and $\angle J = 45^\circ$, find HJ



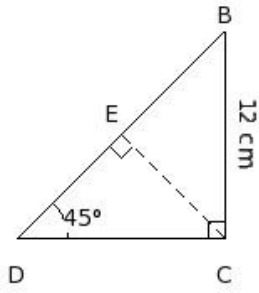
- (i) 30 cm (ii) $30\sqrt{3}$ cm (iii) $\frac{15}{2}\sqrt{12}$ cm (iv) 15 cm (v) $15\sqrt{2}$ cm

9. In the given figure, $\triangle FHG$ is right angled at G. If $FG = 14$ cm and $\angle H = 45^\circ$, find GH



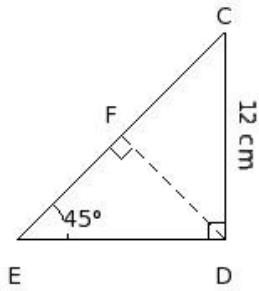
- (i) 14 cm (ii) 11 cm (iii) 15 cm (iv) 17 cm (v) 13 cm

10. In the given figure, $\triangle BDC$ is right angled at C. If $BC = 12$ cm and $\angle D = 45^\circ$, find BE



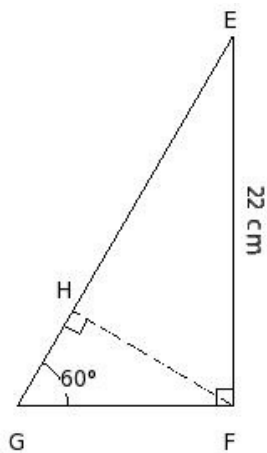
- (i) $6\sqrt{2}$ cm (ii) 6 cm (iii) $3\sqrt{12}$ cm (iv) 12 cm (v) $12\sqrt{3}$ cm

11. In the given figure, $\triangle CED$ is right angled at D. If $CD = 12$ cm and $\angle E = 45^\circ$, find EF



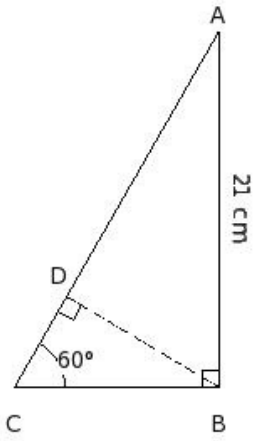
- (i) 6 cm (ii) $6\sqrt{2}$ cm (iii) $12\sqrt{3}$ cm (iv) $3\sqrt{12}$ cm (v) 12 cm

12. In the given figure, $\triangle EGF$ is right angled at F. If $EF = 22$ cm and $\angle G = 60^\circ$, find EG



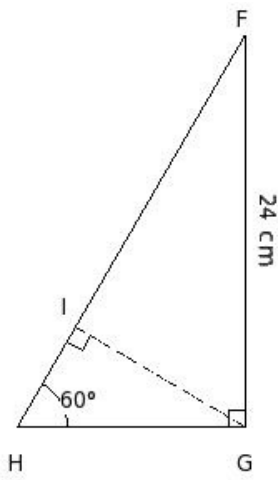
- (i) $\frac{44}{3}\sqrt{18}$ cm (ii) $22\sqrt{2}$ cm (iii) $\frac{44}{3}\sqrt{3}$ cm (iv) $\frac{44}{3}$ cm (v) 44 cm

13. In the given figure, $\triangle ACB$ is right angled at B. If $AB = 21$ cm and $\angle C = 60^\circ$, find BC



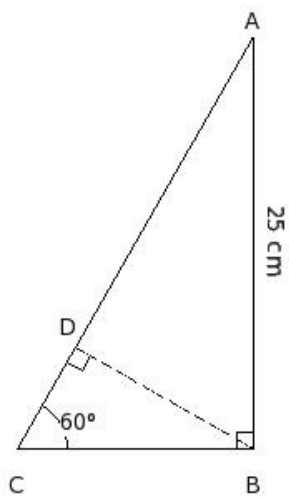
- (i) $\frac{21}{2}\sqrt{2}$ cm (ii) $7\sqrt{18}$ cm (iii) $7\sqrt{3}$ cm (iv) 7 cm (v) 21 cm

14. In the given figure, $\triangle FHG$ is right angled at G. If $FG = 24$ cm and $\angle H = 60^\circ$, find FI



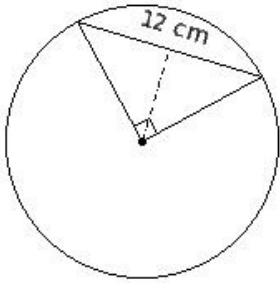
- (i) $12\sqrt{3}$ cm (ii) $18\sqrt{2}$ cm (iii) $12\sqrt{18}$ cm (iv) 12 cm (v) 36 cm

15. In the given figure, $\triangle ACB$ is right angled at B. If $AB = 25$ cm and $\angle C = 60^\circ$, find CD



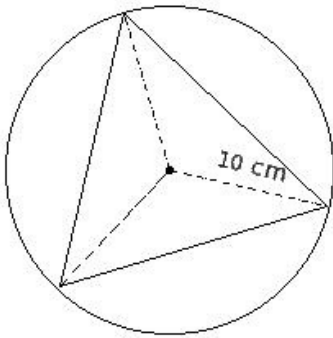
- (i) $\frac{25}{6}\sqrt{18}$ cm (ii) $\frac{25}{6}$ cm (iii) $\frac{25}{2}$ cm (iv) $\frac{25}{6}\sqrt{3}$ cm (v) $\frac{25}{4}\sqrt{2}$ cm

16. A chord of 12 cm subtends an angle of 90° at the centre. Calculate its shortest distance from the centre



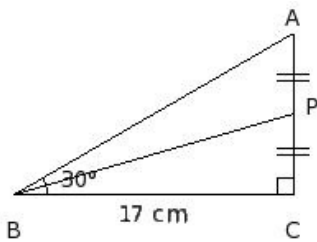
- (i) 8.0 cm (ii) 7.0 cm (iii) 6.0 cm (iv) 4.0 cm (v) 5.0 cm

17. An equilateral triangle is inscribed in a circle of radius 10 cm. Find the length of its sides.



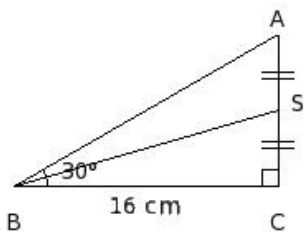
- (i) 10 cm (ii) $10\sqrt{18}$ cm (iii) $15\sqrt{2}$ cm (iv) 30 cm (v) $10\sqrt{3}$ cm

18. In the given figure, $\triangle ABC$ is a right angle triangle with $\angle C = 90^\circ$ and $BC = 17$ cm. P is the mid-point of AC. Find PC



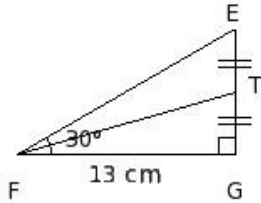
- (i) $\frac{17}{6}$ cm (ii) $\frac{17}{4}\sqrt{2}$ cm (iii) $\frac{17}{6}\sqrt{18}$ cm (iv) $\frac{17}{6}\sqrt{3}$ cm (v) $\frac{17}{2}$ cm

19. In the given figure, $\triangle ABC$ is a right angle triangle with $\angle C = 90^\circ$ and $BC = 16$ cm. S is the mid-point of AC. Find $\angle SBC$ using tables.



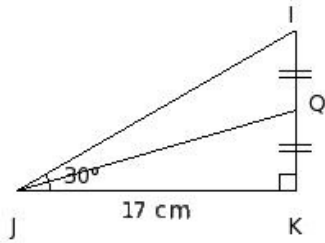
- (i) $19^\circ 6'$ (ii) $14^\circ 6'$ (iii) $18^\circ 6'$ (iv) $13^\circ 6'$ (v) $16^\circ 6'$

20. In the given figure, $\triangle EFG$ is a right angle triangle with $\angle G = 90^\circ$ and $FG = 13$ cm. T is the mid-point of EG. Find the length of the altitude from G to EF.



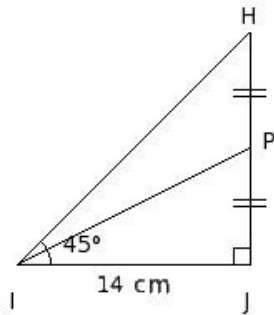
- (i) $\frac{25}{4}$ cm (ii) $\frac{11}{2}$ cm (iii) $\frac{15}{2}$ cm (iv) $\frac{13}{2}$ cm (v) 7 cm

21. In the given figure, $\triangle IJK$ is a right angle triangle with $\angle K = 90^\circ$ and $JK = 17$ cm. Q is the mid-point of IK. Find $\angle QJI$ using tables.



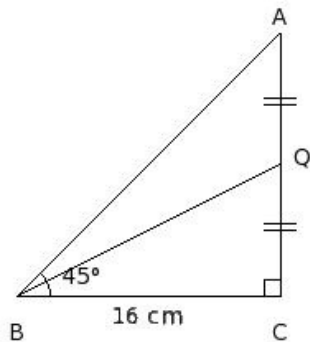
- (i) $15^\circ 54'$ (ii) $16^\circ 54'$ (iii) $13^\circ 54'$ (iv) $10^\circ 54'$ (v) $11^\circ 54'$

22. In the given figure, $\triangle HIJ$ is a right angle triangle with $\angle J = 90^\circ$ and $IJ = 14$ cm. P is the mid-point of HJ. Find PJ



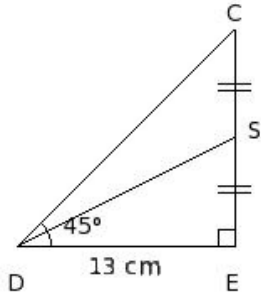
- (i) 6 cm (ii) 8 cm (iii) 9 cm (iv) 5 cm (v) 7 cm

23. In the given figure, $\triangle ABC$ is a right angle triangle with $\angle C = 90^\circ$ and $BC = 16$ cm. Q is the mid-point of AC. Find $\angle QBC$ using tables.



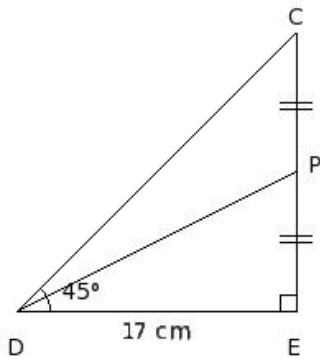
- (i) $26^\circ 34'$ (ii) $28^\circ 34'$ (iii) $29^\circ 34'$ (iv) $23^\circ 34'$ (v) $24^\circ 34'$

24. In the given figure, $\triangle CDE$ is a right angle triangle with $\angle E = 90^\circ$ and $DE = 13$ cm. S is the mid-point of CE. Find the length of the altitude from E to CD.



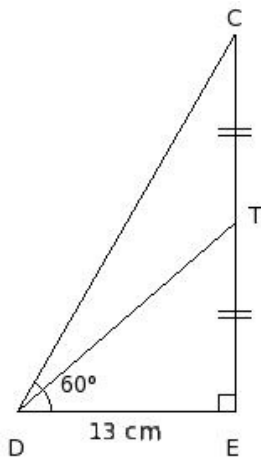
- (i) $\frac{13}{2}$ cm (ii) $13\sqrt{3}$ cm (iii) $\frac{13}{2}\sqrt{2}$ cm (iv) $\frac{13}{4}\sqrt{12}$ cm (v) 13 cm

25. In the given figure, $\triangle CDE$ is a right angle triangle with $\angle E = 90^\circ$ and $DE = 17$ cm. P is the mid-point of CE. Find $\angle PDC$ using tables.



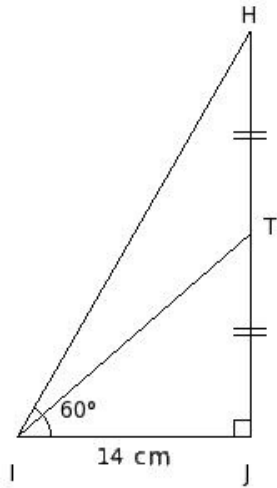
- (i) $21^\circ 26'$ (ii) $16^\circ 26'$ (iii) $15^\circ 26'$ (iv) $18^\circ 26'$ (v) $20^\circ 26'$

26. In the given figure, $\triangle CDE$ is a right angle triangle with $\angle E = 90^\circ$ and $DE = 13$ cm. T is the mid-point of CE. Find TE



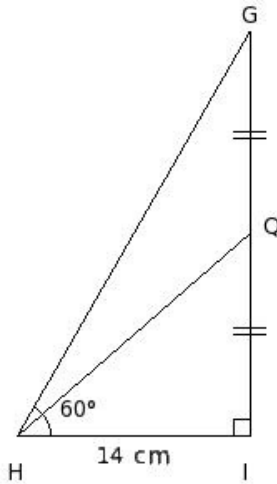
- (i) $\frac{39}{4}\sqrt{2}$ cm (ii) $\frac{39}{2}$ cm (iii) $\frac{13}{2}\sqrt{3}$ cm (iv) $\frac{13}{2}\sqrt{18}$ cm (v) $\frac{13}{2}$ cm

27. In the given figure, $\triangle HIJ$ is a right angle triangle with $\angle J = 90^\circ$ and $IJ = 14$ cm. T is the mid-point of HJ. Find $\angle TIJ$ using tables.



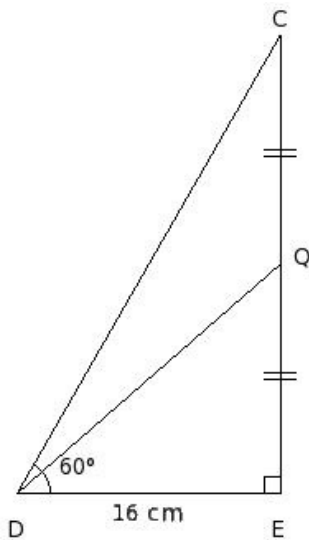
- (i) $43^\circ 53'$ (ii) $38^\circ 53'$ (iii) $37^\circ 53'$ (iv) $40^\circ 53'$ (v) $42^\circ 53'$

28. In the given figure, $\triangle GHI$ is a right angle triangle with $\angle I = 90^\circ$ and $HI = 14$ cm. Q is the mid-point of GI. Find the length of the altitude from I to GH.



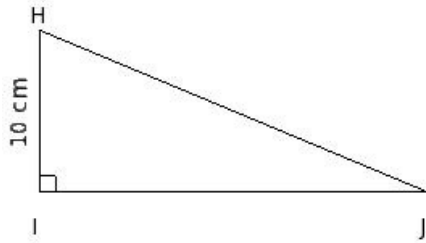
- (i) $7\sqrt{18}$ cm (ii) 7 cm (iii) $7\sqrt{3}$ cm (iv) 21 cm (v) $\frac{21}{2}\sqrt{2}$ cm

29. In the given figure, $\triangle CDE$ is a right angle triangle with $\angle E = 90^\circ$ and $DE = 16$ cm. Q is the mid-point of CE. Find $\angle QDC$ using tables.



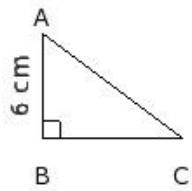
- (i) $22^\circ 7'$ (ii) $21^\circ 7'$ (iii) $16^\circ 7'$ (iv) $19^\circ 7'$ (v) $17^\circ 7'$

30. In the given figure, if $HJ - IJ = 2$ cm, and $HI = 10$ cm, find $\sin H$



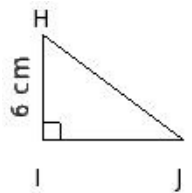
- (i) $\frac{14}{13}$ (ii) $\frac{12}{13}$ (iii) $\frac{12}{11}$ (iv) $\frac{4}{5}$ (v) $\frac{10}{13}$

31. In the given figure, if $AC - BC = 2$ cm, and $AB = 6$ cm, find $\cos A$



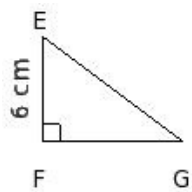
- (i) $\frac{1}{5}$ (ii) $\frac{3}{5}$ (iii) 1 (iv) $\frac{3}{7}$

32. In the given figure, if $HJ - IJ = 2$ cm, and $HI = 6$ cm, find $\tan H$



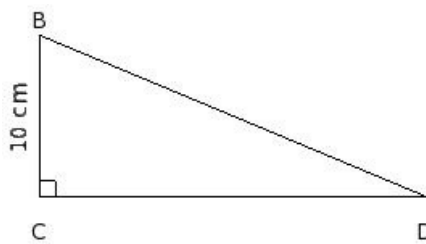
- (i) 2 (ii) $\frac{4}{3}$ (iii) 4 (iv) $\frac{4}{5}$ (v) $\frac{2}{3}$

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



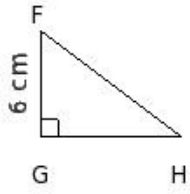
- (i) $\frac{6}{5}$ (ii) $\frac{2}{5}$ (iii) $\frac{4}{7}$ (iv) $\frac{4}{5}$ (v) $\frac{4}{3}$

34. In the given figure, if $BD + CD = 50$ cm, and $BC = 10$ cm, find $\cos B$



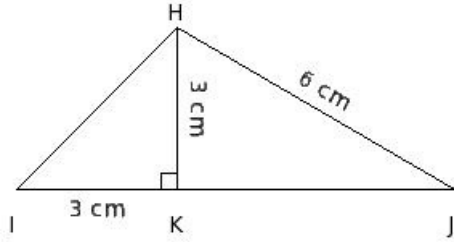
- (i) $\frac{5}{13}$ (ii) $\frac{1}{3}$ (iii) $\frac{7}{13}$ (iv) $\frac{3}{13}$ (v) $\frac{5}{11}$

35. In the given figure, if $FH + GH = 18$ cm, and $FG = 6$ cm, find $\tan F$



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

36. The altitude HK of $\triangle HIJ$ in which $\angle H$ is obtuse is 3 cm. If $IK = 3$ cm and $JK = 3\sqrt{3}$ cm, find $\angle IHJ$



- (i) 120° (ii) 110° (iii) 105° (iv) 115° (v) 100°

Assignment Key

1) (iv)	2) (iv)	3) (ii)	4) (iv)	5) (iii)	6) (iv)
7) (iii)	8) (v)	9) (i)	10) (i)	11) (ii)	12) (iii)
13) (iii)	14) (i)	15) (iv)	16) (iii)	17) (v)	18) (iv)
19) (v)	20) (iv)	21) (iii)	22) (v)	23) (i)	24) (iii)
25) (iv)	26) (iii)	27) (iv)	28) (iii)	29) (iv)	30) (ii)
31) (ii)	32) (ii)	33) (iv)	34) (i)	35) (iii)	36) (iii)