



1. Which of the following are measures of an equilateral triangle ?

- (i) $GH = 13 \text{ cm}$, $HI = 10 \text{ cm}$, $IG = 13 \text{ cm}$ (ii) $GH = 11 \text{ cm}$, $HI = 14 \text{ cm}$, $IG = 13 \text{ cm}$
(iii) $GH = 15 \text{ cm}$, $HI = 15 \text{ cm}$, $IG = 21.21 \text{ cm}$ (iv) $GH = 10 \text{ cm}$, $HI = 15 \text{ cm}$, $IG = 18.03 \text{ cm}$
(v) $GH = 15 \text{ cm}$, $HI = 15 \text{ cm}$, $IG = 15 \text{ cm}$

2. Which of the following are measures of an isosceles triangle ?

- (i) $OP = 11 \text{ cm}$, $PQ = 15 \text{ cm}$, $QO = 10 \text{ cm}$ (ii) $OP = 10 \text{ cm}$, $PQ = 10 \text{ cm}$, $QO = 10 \text{ cm}$
(iii) $OP = 13 \text{ cm}$, $PQ = 12 \text{ cm}$, $QO = 10 \text{ cm}$ (iv) $OP = 13 \text{ cm}$, $PQ = 11 \text{ cm}$, $QO = 13 \text{ cm}$
(v) $OP = 15 \text{ cm}$, $PQ = 11 \text{ cm}$, $QO = 18.6 \text{ cm}$

3. Which of the following are measures of a scalene triangle ?

- (i) $NO = 13 \text{ cm}$, $OP = 15 \text{ cm}$, $PN = 11 \text{ cm}$ (ii) $NO = 10 \text{ cm}$, $OP = 10 \text{ cm}$, $PN = 10 \text{ cm}$
(iii) $NO = 15 \text{ cm}$, $OP = 10 \text{ cm}$, $PN = 15 \text{ cm}$ (iv) $NO = 12 \text{ cm}$, $OP = 14 \text{ cm}$, $PN = 12 \text{ cm}$
(v) $NO = 14 \text{ cm}$, $OP = 14 \text{ cm}$, $PN = 19.8 \text{ cm}$

4. Which of the following are measures of a right angled triangle ?

- (i) $OP = 11 \text{ cm}$, $PQ = 15 \text{ cm}$, $QO = 18.6 \text{ cm}$ (ii) $OP = 11 \text{ cm}$, $PQ = 11 \text{ cm}$, $QO = 11 \text{ cm}$
(iii) $OP = 12 \text{ cm}$, $PQ = 10 \text{ cm}$, $QO = 14 \text{ cm}$ (iv) $OP = 14 \text{ cm}$, $PQ = 19 \text{ cm}$, $QO = 11 \text{ cm}$
(v) $OP = 12 \text{ cm}$, $PQ = 11 \text{ cm}$, $QO = 13 \text{ cm}$

5. Which of the following are measures of an isosceles right angled triangle ?

- (i) $EF = 11 \text{ cm}$, $FG = 11 \text{ cm}$, $GE = 11 \text{ cm}$ (ii) $EF = 10 \text{ cm}$, $FG = 13 \text{ cm}$, $GE = 14 \text{ cm}$
(iii) $EF = 10 \text{ cm}$, $FG = 13 \text{ cm}$, $GE = 10 \text{ cm}$ (iv) $EF = 11 \text{ cm}$, $FG = 18 \text{ cm}$, $GE = 11 \text{ cm}$
(v) $EF = 10 \text{ cm}$, $FG = 10 \text{ cm}$, $GE = 14.14 \text{ cm}$

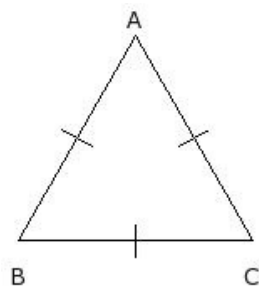
6. Which of the following are measures of an acute angled triangle ?

- (i) $OP = 12 \text{ cm}$, $PQ = 11 \text{ cm}$, $QO = 12 \text{ cm}$ (ii) $OP = 13 \text{ cm}$, $PQ = 19 \text{ cm}$, $QO = 11 \text{ cm}$
(iii) $OP = 13 \text{ cm}$, $PQ = 11 \text{ cm}$, $QO = 17.03 \text{ cm}$ (iv) $OP = 13 \text{ cm}$, $PQ = 13 \text{ cm}$, $QO = 18.38 \text{ cm}$
(v) $OP = 12 \text{ cm}$, $PQ = 17 \text{ cm}$, $QO = 10 \text{ cm}$

7. Which of the following are measures of an obtuse angled triangle ?

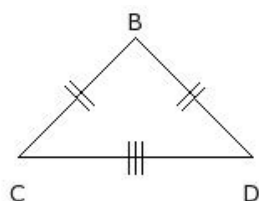
- (i) $KL = 11 \text{ cm}$, $LM = 11 \text{ cm}$, $MK = 15.56 \text{ cm}$ (ii) $KL = 10 \text{ cm}$, $LM = 10 \text{ cm}$, $MK = 11 \text{ cm}$
(iii) $KL = 12 \text{ cm}$, $LM = 15 \text{ cm}$, $MK = 11 \text{ cm}$ (iv) $KL = 13 \text{ cm}$, $LM = 10 \text{ cm}$, $MK = 16.4 \text{ cm}$
(v) $KL = 12 \text{ cm}$, $LM = 16 \text{ cm}$, $MK = 10 \text{ cm}$

8. Which of the following are measures of an equilateral triangle ?



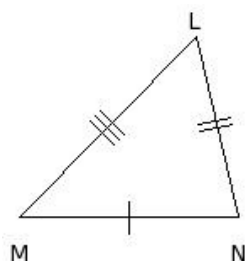
- (i) $AB = 13 \text{ cm}$, $BC = 10 \text{ cm}$, $CA = 13 \text{ cm}$ (ii) $AB = 15 \text{ cm}$, $BC = 15 \text{ cm}$, $CA = 21.21 \text{ cm}$
(iii) $AB = 12 \text{ cm}$, $BC = 10 \text{ cm}$, $CA = 15 \text{ cm}$ (iv) $AB = 14 \text{ cm}$, $BC = 14 \text{ cm}$, $CA = 14 \text{ cm}$
(v) $AB = 11 \text{ cm}$, $BC = 14 \text{ cm}$, $CA = 17.8 \text{ cm}$

9. Which of the following are measures of an isosceles triangle ?



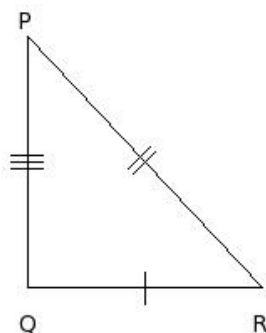
- (i) $BC = 13 \text{ cm}$, $CD = 11 \text{ cm}$, $DB = 15 \text{ cm}$ (ii) $BC = 11 \text{ cm}$, $CD = 11 \text{ cm}$, $DB = 11 \text{ cm}$
(iii) $BC = 10 \text{ cm}$, $CD = 14 \text{ cm}$, $DB = 10 \text{ cm}$ (iv) $BC = 11 \text{ cm}$, $CD = 14 \text{ cm}$, $DB = 13 \text{ cm}$
(v) $BC = 10 \text{ cm}$, $CD = 15 \text{ cm}$, $DB = 18.03 \text{ cm}$

10. Which of the following are measures of a scalene triangle ?



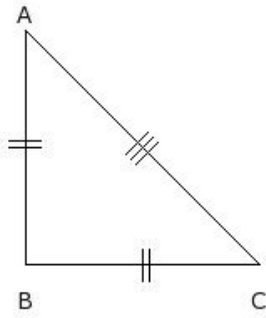
- (i) $LM = 12 \text{ cm}$, $MN = 14 \text{ cm}$, $NL = 12 \text{ cm}$ (ii) $LM = 15 \text{ cm}$, $MN = 13 \text{ cm}$, $NL = 11 \text{ cm}$
(iii) $LM = 13 \text{ cm}$, $MN = 13 \text{ cm}$, $NL = 18.38 \text{ cm}$ (iv) $LM = 11 \text{ cm}$, $MN = 11 \text{ cm}$, $NL = 11 \text{ cm}$
(v) $LM = 12 \text{ cm}$, $MN = 13 \text{ cm}$, $NL = 12 \text{ cm}$

11. Which of the following are measures of a right angled triangle ?



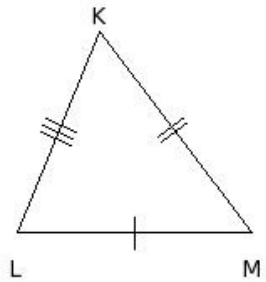
- (i) $PQ = 14 \text{ cm}$, $QR = 11 \text{ cm}$, $RP = 14 \text{ cm}$ (ii) $PQ = 15 \text{ cm}$, $QR = 19 \text{ cm}$, $RP = 11 \text{ cm}$
(iii) $PQ = 14 \text{ cm}$, $QR = 11 \text{ cm}$, $RP = 15 \text{ cm}$ (iv) $PQ = 12 \text{ cm}$, $QR = 12 \text{ cm}$, $RP = 12 \text{ cm}$
(v) $PQ = 15 \text{ cm}$, $QR = 14 \text{ cm}$, $RP = 20.52 \text{ cm}$

12. Which of the following are measures of an isosceles right angled triangle ?



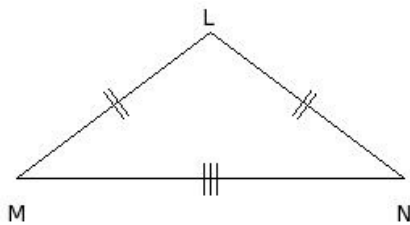
- (i) $AB = 15 \text{ cm}$, $BC = 13 \text{ cm}$, $CA = 12 \text{ cm}$ (ii) $AB = 12 \text{ cm}$, $BC = 12 \text{ cm}$, $CA = 12 \text{ cm}$
 (iii) $AB = 11 \text{ cm}$, $BC = 14 \text{ cm}$, $CA = 13 \text{ cm}$ (iv) $AB = 13 \text{ cm}$, $BC = 22 \text{ cm}$, $CA = 14 \text{ cm}$
 (v) $AB = 14 \text{ cm}$, $BC = 14 \text{ cm}$, $CA = 19.8 \text{ cm}$

13. Which of the following are measures of an acute angled triangle ?



- (i) $KL = 12 \text{ cm}$, $LM = 14 \text{ cm}$, $MK = 18.44 \text{ cm}$ (ii) $KL = 13 \text{ cm}$, $LM = 14 \text{ cm}$, $MK = 15 \text{ cm}$
 (iii) $KL = 11 \text{ cm}$, $LM = 16 \text{ cm}$, $MK = 10 \text{ cm}$ (iv) $KL = 12 \text{ cm}$, $LM = 12 \text{ cm}$, $MK = 16.97 \text{ cm}$
 (v) $KL = 12 \text{ cm}$, $LM = 19 \text{ cm}$, $MK = 10 \text{ cm}$

14. Which of the following are measures of an obtuse angled triangle ?



- (i) $LM = 15 \text{ cm}$, $MN = 11 \text{ cm}$, $NL = 12 \text{ cm}$ (ii) $LM = 15 \text{ cm}$, $MN = 15 \text{ cm}$, $NL = 21.21 \text{ cm}$
 (iii) $LM = 11 \text{ cm}$, $MN = 14 \text{ cm}$, $NL = 17.8 \text{ cm}$ (iv) $LM = 11 \text{ cm}$, $MN = 14 \text{ cm}$, $NL = 10 \text{ cm}$
 (v) $LM = 15 \text{ cm}$, $MN = 24 \text{ cm}$, $NL = 15 \text{ cm}$

15. Which of the following are measures of an equilateral triangle ?

- (i) $\angle K = 40.16^\circ$, $\angle L = 75.31^\circ$, $\angle M = 64.53^\circ$ (ii) $\angle K = 36.25^\circ$, $\angle L = 90^\circ$, $\angle M = 53.75^\circ$
 (iii) $\angle K = 45^\circ$, $\angle L = 90^\circ$, $\angle M = 45^\circ$ (iv) $\angle K = 60^\circ$, $\angle L = 60^\circ$, $\angle M = 60^\circ$
 (v) $\angle K = 66.74^\circ$, $\angle L = 56.63^\circ$, $\angle M = 56.63^\circ$

16. Which of the following are measures of an isosceles triangle ?

- (i) $\angle M = 60^\circ$, $\angle N = 60^\circ$, $\angle O = 60^\circ$ (ii) $\angle M = 57.56^\circ$, $\angle N = 45.57^\circ$, $\angle O = 76.87^\circ$
 (iii) $\angle M = 47.16^\circ$, $\angle N = 66.42^\circ$, $\angle O = 66.42^\circ$ (iv) $\angle M = 47.49^\circ$, $\angle N = 90^\circ$, $\angle O = 42.51^\circ$
 (v) $\angle M = 85.46^\circ$, $\angle N = 41.65^\circ$, $\angle O = 52.89^\circ$

17. Which of the following are measures of a scalene triangle ?

- (i) $\angle C = 47.16^\circ$, $\angle D = 41.8^\circ$, $\angle E = 91.04^\circ$ (ii) $\angle C = 60^\circ$, $\angle D = 60^\circ$, $\angle E = 60^\circ$
(iii) $\angle C = 45^\circ$, $\angle D = 90^\circ$, $\angle E = 45^\circ$ (iv) $\angle C = 38.94^\circ$, $\angle D = 70.53^\circ$, $\angle E = 70.53^\circ$
(v) $\angle C = 65.16^\circ$, $\angle D = 57.42^\circ$, $\angle E = 57.42^\circ$

18. Which of the following are measures of a right angled triangle ?

- (i) $\angle E = 50.19^\circ$, $\angle F = 90^\circ$, $\angle G = 39.81^\circ$ (ii) $\angle E = 91.3^\circ$, $\angle F = 51.04^\circ$, $\angle G = 37.66^\circ$
(iii) $\angle E = 83.47^\circ$, $\angle F = 45.21^\circ$, $\angle G = 51.32^\circ$ (iv) $\angle E = 60^\circ$, $\angle F = 60^\circ$, $\angle G = 60^\circ$
(v) $\angle E = 55.83^\circ$, $\angle F = 49.32^\circ$, $\angle G = 74.85^\circ$

19. Which of the following are measures of an isosceles right angled triangle ?

- (i) $\angle G = 109.08^\circ$, $\angle H = 36.97^\circ$, $\angle I = 33.95^\circ$ (ii) $\angle G = 62.33^\circ$, $\angle H = 55.33^\circ$, $\angle I = 62.34^\circ$
(iii) $\angle G = 45^\circ$, $\angle H = 90^\circ$, $\angle I = 45^\circ$ (iv) $\angle G = 50.13^\circ$, $\angle H = 73.62^\circ$, $\angle I = 56.25^\circ$
(v) $\angle G = 60^\circ$, $\angle H = 60^\circ$, $\angle I = 60^\circ$

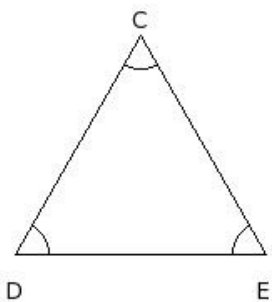
20. Which of the following are measures of an acute angled triangle ?

- (i) $\angle H = 44.42^\circ$, $\angle I = 57.12^\circ$, $\angle J = 78.46^\circ$ (ii) $\angle H = 132.84^\circ$, $\angle I = 28.57^\circ$, $\angle J = 18.59^\circ$
(iii) $\angle H = 136.3^\circ$, $\angle I = 20.21^\circ$, $\angle J = 23.49^\circ$ (iv) $\angle H = 50.19^\circ$, $\angle I = 90^\circ$, $\angle J = 39.81^\circ$
(v) $\angle H = 45^\circ$, $\angle I = 90^\circ$, $\angle J = 45^\circ$

21. Which of the following are measures of an obtuse angled triangle ?

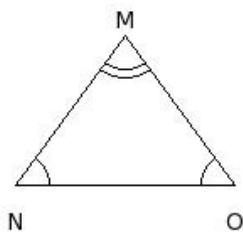
- (i) $\angle B = 46.97^\circ$, $\angle C = 90^\circ$, $\angle D = 43.03^\circ$ (ii) $\angle B = 45^\circ$, $\angle C = 90^\circ$, $\angle D = 45^\circ$
(iii) $\angle B = 62.33^\circ$, $\angle C = 62.34^\circ$, $\angle D = 55.33^\circ$ (iv) $\angle B = 99.15^\circ$, $\angle C = 42.75^\circ$, $\angle D = 38.1^\circ$
(v) $\angle B = 75.31^\circ$, $\angle C = 40.16^\circ$, $\angle D = 64.53^\circ$

22. Which of the following are measures of an equilateral triangle ?



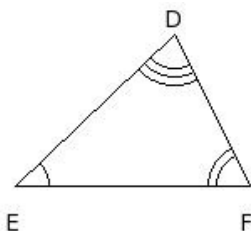
- (i) $\angle C = 45^\circ$, $\angle D = 90^\circ$, $\angle E = 45^\circ$ (ii) $\angle C = 83.47^\circ$, $\angle D = 45.21^\circ$, $\angle E = 51.32^\circ$
(iii) $\angle C = 88.86^\circ$, $\angle D = 45.57^\circ$, $\angle E = 45.57^\circ$ (iv) $\angle C = 60^\circ$, $\angle D = 60^\circ$, $\angle E = 60^\circ$
(v) $\angle C = 36.25^\circ$, $\angle D = 90^\circ$, $\angle E = 53.75^\circ$

23. Which of the following are measures of an isosceles triangle ?



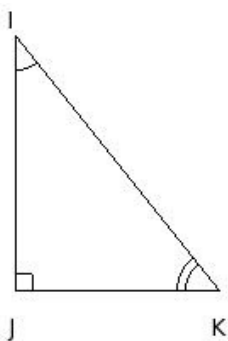
- (i) $\angle M = 49.4^\circ$, $\angle N = 90^\circ$, $\angle O = 40.6^\circ$ (ii) $\angle M = 72.44^\circ$, $\angle N = 53.78^\circ$, $\angle O = 53.78^\circ$
 (iii) $\angle M = 60^\circ$, $\angle N = 60^\circ$, $\angle O = 60^\circ$ (iv) $\angle M = 52.62^\circ$, $\angle N = 59.41^\circ$, $\angle O = 67.97^\circ$
 (v) $\angle M = 70.81^\circ$, $\angle N = 61.28^\circ$, $\angle O = 47.91^\circ$

24. Which of the following are measures of a scalene triangle ?



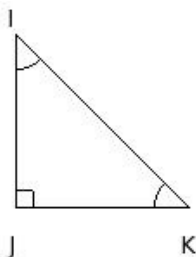
- (i) $\angle D = 73.69^\circ$, $\angle E = 43.28^\circ$, $\angle F = 63.03^\circ$ (ii) $\angle D = 45^\circ$, $\angle E = 90^\circ$, $\angle F = 45^\circ$
 (iii) $\angle D = 72.44^\circ$, $\angle E = 53.78^\circ$, $\angle F = 53.78^\circ$ (iv) $\angle D = 85.98^\circ$, $\angle E = 47.01^\circ$, $\angle F = 47.01^\circ$
 (v) $\angle D = 60^\circ$, $\angle E = 60^\circ$, $\angle F = 60^\circ$

25. Which of the following are measures of a right angled triangle ?



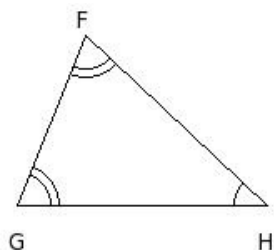
- (i) $\angle I = 60^\circ$, $\angle J = 60^\circ$, $\angle K = 60^\circ$ (ii) $\angle I = 55.3^\circ$, $\angle J = 48.37^\circ$, $\angle K = 76.33^\circ$
 (iii) $\angle I = 38.66^\circ$, $\angle J = 90^\circ$, $\angle K = 51.34^\circ$ (iv) $\angle I = 74.85^\circ$, $\angle J = 49.32^\circ$, $\angle K = 55.83^\circ$
 (v) $\angle I = 106.26^\circ$, $\angle J = 36.87^\circ$, $\angle K = 36.87^\circ$

26. Which of the following are measures of an isosceles right angled triangle ?



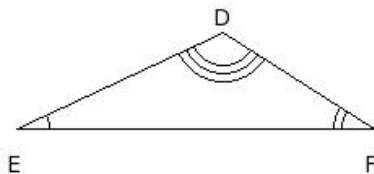
- (i) $\angle I = 62.52^\circ$, $\angle J = 54.97^\circ$, $\angle K = 62.51^\circ$ (ii) $\angle I = 45^\circ$, $\angle J = 90^\circ$, $\angle K = 45^\circ$
 (iii) $\angle I = 60^\circ$, $\angle J = 60^\circ$, $\angle K = 60^\circ$ (iv) $\angle I = 109.47^\circ$, $\angle J = 31.59^\circ$, $\angle K = 38.94^\circ$
 (v) $\angle I = 59.49^\circ$, $\angle J = 67.38^\circ$, $\angle K = 53.13^\circ$

27. Which of the following are measures of an acute angled triangle ?



- (i) $\angle F = 51.34^\circ$, $\angle G = 90^\circ$, $\angle H = 38.66^\circ$ (ii) $\angle F = 135.59^\circ$, $\angle G = 21.34^\circ$, $\angle H = 23.07^\circ$
(iii) $\angle F = 104.68^\circ$, $\angle G = 37.66^\circ$, $\angle H = 37.66^\circ$ (iv) $\angle F = 45^\circ$, $\angle G = 90^\circ$, $\angle H = 45^\circ$
(v) $\angle F = 68.49^\circ$, $\angle G = 68.49^\circ$, $\angle H = 43.02^\circ$

28. Which of the following are measures of an obtuse angled triangle ?



- (i) $\angle D = 40.24^\circ$, $\angle E = 90^\circ$, $\angle F = 49.76^\circ$ (ii) $\angle D = 67.38^\circ$, $\angle E = 53.13^\circ$, $\angle F = 59.49^\circ$
(iii) $\angle D = 122.84^\circ$, $\angle E = 24.84^\circ$, $\angle F = 32.32^\circ$ (iv) $\angle D = 44.42^\circ$, $\angle E = 62.96^\circ$, $\angle F = 72.62^\circ$
(v) $\angle D = 45^\circ$, $\angle E = 90^\circ$, $\angle F = 45^\circ$

29. Find the measures of the three sides suitable to form a triangle?

- (i) $HI = 7\text{ cm}$, $IJ = 12\text{ cm}$, $JH = 20\text{ cm}$ (ii) $HI = 10\text{ cm}$, $IJ = 19\text{ cm}$, $JH = 5\text{ cm}$
(iii) $HI = 10\text{ cm}$, $IJ = 20\text{ cm}$, $JH = 6\text{ cm}$ (iv) $HI = 7\text{ cm}$, $IJ = 13\text{ cm}$, $JH = 5\text{ cm}$
(v) $HI = 14\text{ cm}$, $IJ = 10\text{ cm}$, $JH = 15\text{ cm}$

30. Find the measures of the three angles suitable to form a triangle?

- (i) $\angle E = 107.80^\circ$, $\angle F = 43.80^\circ$, $\angle G = 119.10^\circ$ (ii) $\angle E = 41.41^\circ$, $\angle F = 41.41^\circ$, $\angle G = 97.18^\circ$
(iii) $\angle E = 83.80^\circ$, $\angle F = 116.20^\circ$, $\angle G = 75.90^\circ$ (iv) $\angle E = 88.60^\circ$, $\angle F = 72.50^\circ$, $\angle G = 50.50^\circ$
(v) $\angle E = 107.30^\circ$, $\angle F = 104.90^\circ$, $\angle G = 55.30^\circ$

31. In a right angled triangle, if one of the angles is 47.73° , find the third angle

- (i) 42.27° (ii) 72.27° (iii) 47.27° (iv) 57.27° (v) 52.27°

32. In a right angled triangle, if one of the angles is 35.54° , find the third angle

- (i) 59.46° (ii) 64.46° (iii) 84.46° (iv) 69.46° (v) 54.46°

Assignment Key

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