EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Triangles

Grade : ICSE Grade VI

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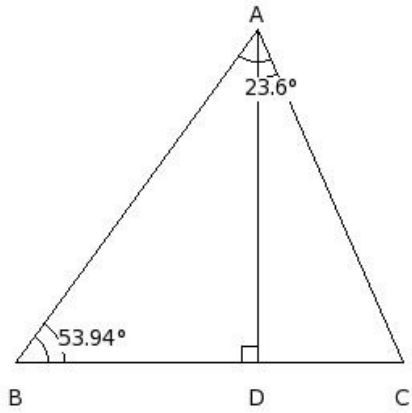
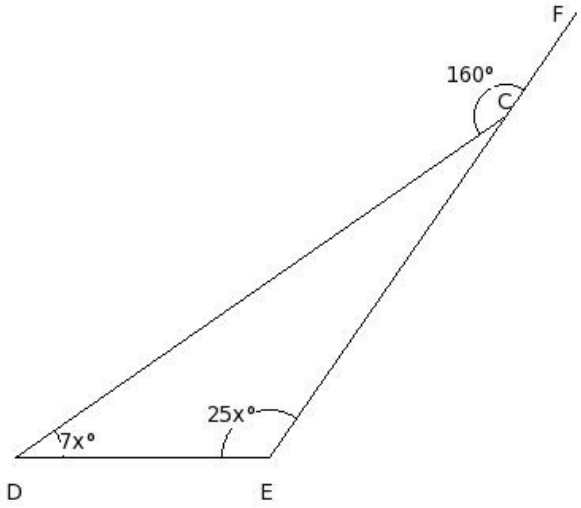
1. In the given figure , if DA ⊥ BC and ∠ABD = 53.94°, find ∠DCA



(i) 64.40° (ii) 65.40° (iii) 68.40° (iv) 67.40° (v) 66.40°

2. In the following figure, one side of a triangle has been produced. Find all the angles of the triangle.



(i) C=18°,D=35°,E=127° (ii) C=18°,D=37°,E=125° (iii) C=20°,D=35°,E=125°

(iv) C=20°,D=33°,E=127° (v) C=22°,D=35°,E=123°

3. Consider the following figure. State which of the following statements are true

a) $\overline{LM} = \overline{MK}$

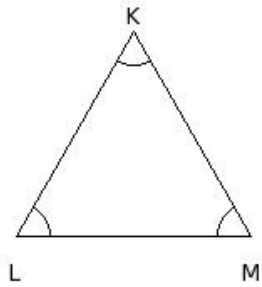
b) $\overline{KL} \neq \overline{LM}$

c) $\overline{KL} = \overline{LM}$

d) $\overline{LM} \neq \overline{MK}$

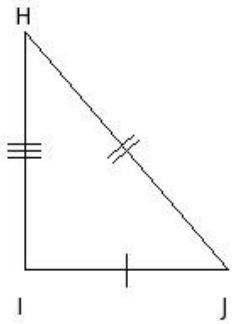
e) $\overline{MK} = \overline{KL}$

f) $\overline{MK} \neq \overline{KL}$



(i) {d,c} (ii) {d,a,c} (iii) {b,a} (iv) {a,c,e} (v) {f,b,e}

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



(i) HI = 14 cm , IJ = 12 cm , JH = 18.44 cm (ii) HI = 14 cm , IJ = 11 cm , JH = 15 cm

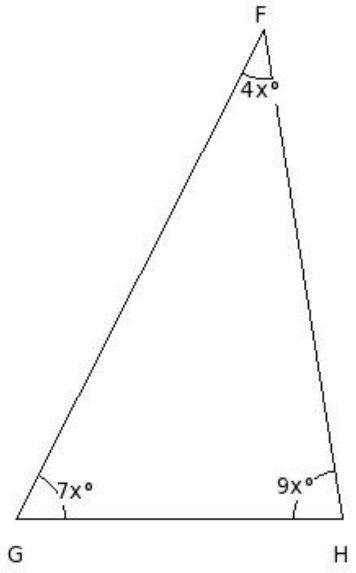
(iii) HI = 12 cm , IJ = 14 cm , JH = 13 cm (iv) HI = 10 cm , IJ = 17 cm , JH = 13 cm

(v) HI = 10 cm , IJ = 10 cm , JH = 10 cm

5. If all the three angles of a triangle are of the same measure, find the measure of each of the angles.

(i) 58° (ii) 59° (iii) 61° (iv) 62° (v) 60°

6. Find the angles of the triangle



(i) F=36°,G=61°,H=83° (ii) F=34°,G=65°,H=81° (iii) F=34°,G=63°,H=83° (iv) F=36°,G=63°,H=81°

(v) F=38°,G=63°,H=79°

7. In a right angled triangle, if one of the angles is 43.03°, find the third angle

(i) 61.97° (ii) 76.97° (iii) 51.97° (iv) 56.97° (v) 46.97°

8. In △CDE, if ∠C = 30° and ∠D = ∠E, find the measure of each of the equal angles of the triangle

(i) 76° (ii) 74° (iii) 75° (iv) 77° (v) 73°

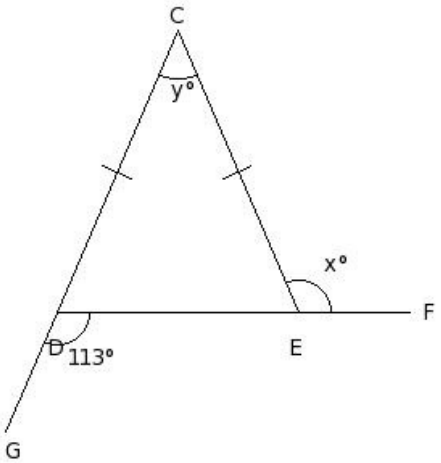
9. Which of the following are measures of an isosceles right angled triangle ?

(i) ∠K = 61.28° , ∠L = 69.98° , ∠M = 48.74° (ii) ∠K = 60° , ∠L = 60° , ∠M = 60°

(iii) ∠K = 96.82° , ∠L = 37.36° , ∠M = 45.82° (iv) ∠K = 45° , ∠L = 90° , ∠M = 45°

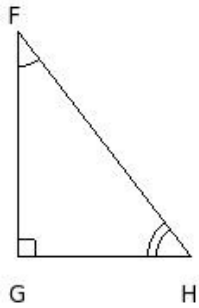
(v) ∠K = 59.41° , ∠L = 67.97° , ∠M = 52.62°

10. Find the unknown marked angles in the following figure



(i) x=113°,y=46° (ii) x=114°,y=47° (iii) x=115°,y=48° (iv) x=111°,y=44° (v) x=112°,y=45°

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

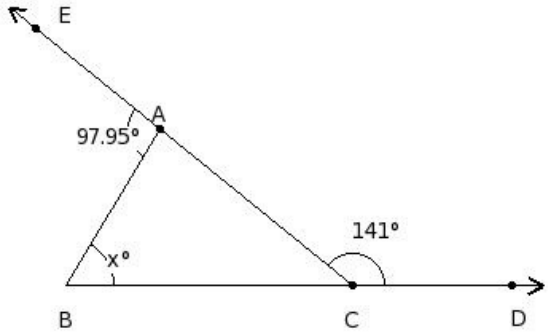


(i) $\angle F = 93.58°$, $\angle G = 47.34°$, $\angle H = 39.08°$ (ii) $\angle F = 51.32°$, $\angle G = 45.21°$, $\angle H = 83.47°$

(iii) $\angle F = 60°$, $\angle G = 60°$, $\angle H = 60°$ (iv) $\angle F = 37.57°$, $\angle G = 90°$, $\angle H = 52.43°$

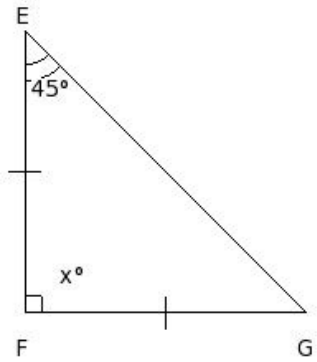
(v) $\angle F = 41.65°$, $\angle G = 85.46°$, $\angle H = 52.89°$

12. Find the unknown marked angle in the following figure



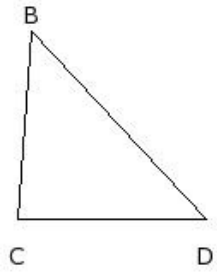
(i) $x=60.95°$ (ii) $x=59.95°$ (iii) $x=57.95°$ (iv) $x=56.95°$ (v) $x=58.95°$

13. Find the unknown angle in the following figure



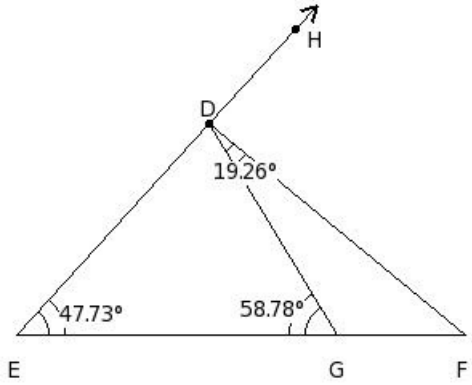
(i) $x=89°$ (ii) $x=90°$ (iii) $x=88°$ (iv) $x=91°$ (v) $x=92°$

14. The vertex opposite to the side $\overline{BC}$



(i) B (ii) $\overline{DE}$ (iii) C (iv) D

15. In below given figure, find ∠GDE



(i) 74.49° (ii) 75.49° (iii) 73.49° (iv) 72.49° (v) 71.49°

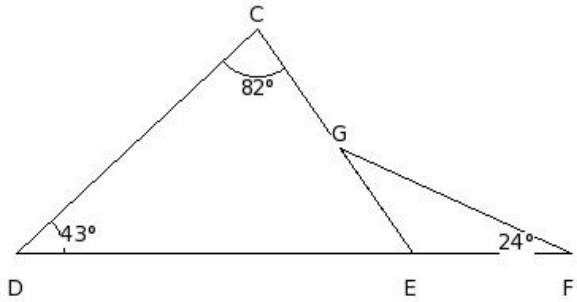
16. Which of the following are measures of an equilateral triangle ?

(i) ∠J = 45° , ∠K = 90° , ∠L = 45° (ii) ∠J = 60° , ∠K = 60° , ∠L = 60°

(iii) ∠J = 43.28° , ∠K = 73.69° , ∠L = 63.03° (iv) ∠J = 47.49° , ∠K = 90° , ∠L = 42.51°

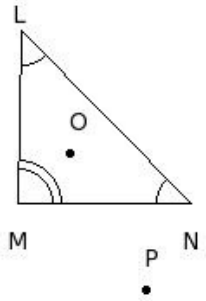
(v) ∠J = 65.6° , ∠K = 57.2° , ∠L = 57.2°

17. In the given figure, find ∠CGF



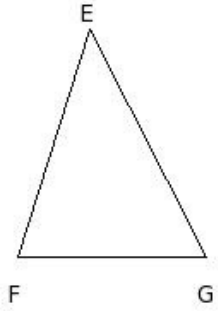
(i) 149° (ii) 151° (iii) 150° (iv) 147° (v) 148°

18. The vertices of the triangle are



(i) L , M , O (ii) N , O , P (iii) M , N , O (iv) L , M , N (v) M , N , P

19. The side opposite to the vertex F



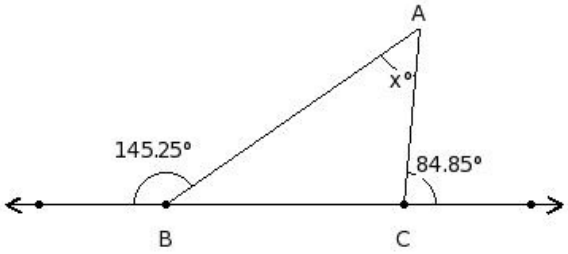
(i) $\overline{EF}$ (ii) $\overline{EI}$ (iii) $\overline{GE}$ (iv) $\overline{FG}$ (v) $\overline{HF}$

20. The ratio between the base angle and the vertical angle of an isosceles triangle is 13 : 10. Find each angle of the triangle

(i) A=50°,B=65°,C=65° (ii) A=52°,B=65°,C=63° (iii) A=48°,B=67°,C=65° (iv) A=50°,B=63°,C=67°

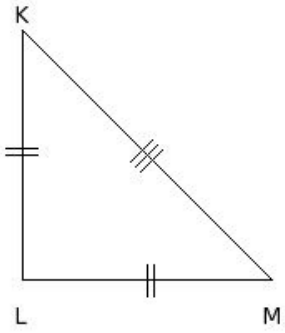
(v) A=48°,B=65°,C=67°

21. Calculate the value of the lettered angle in the following figure



(i) x=48.1° (ii) x=52.1° (iii) x=51.1° (iv) x=50.1° (v) x=49.1°

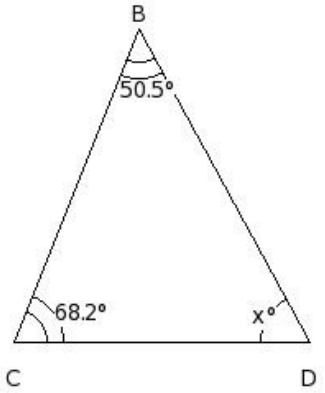
22. Which of the following are measures of an isosceles right angled triangle ?



(i) KL = 14 cm , LM = 13 cm , MK = 15 cm (ii) KL = 15 cm , LM = 15 cm , MK = 21.21 cm

(iii) KL = 10 cm , LM = 17 cm , MK = 11 cm (iv) KL = 14 cm , LM = 14 cm , MK = 14 cm

23. Find the unknown angle from the following figure



(i) x=63.3° (ii) x=60.3° (iii) x=59.3° (iv) x=61.3° (v) x=62.3°

24. Consider the following figure. State which of the following statements are true

a) $\overline{LJ} = \overline{JK}$

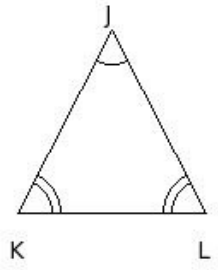
b) $\overline{JK} \neq \overline{KL}$

c) $\overline{KL} \neq \overline{LJ}$

d) $\overline{LJ} \neq \overline{JK}$

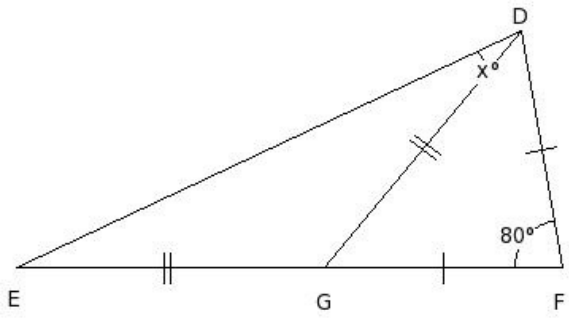
e) $\overline{JK} = \overline{KL}$

f) $\overline{KL} = \overline{LJ}$



(i) {d,a} (ii) {a,b,c} (iii) {e,b} (iv) {f,d,c} (v) {e,a,b}

25. In the given figure, find the value of x.



(i) x=24° (ii) x=23° (iii) x=27° (iv) x=25° (v) x=26°

Assignment Key

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

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