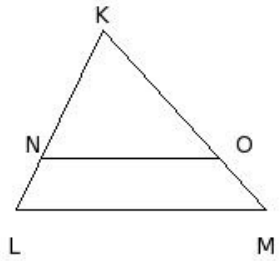
EduSahara™ Assignment

Name : Basic Proportionality Theorem

Chapter : Similar Triangles

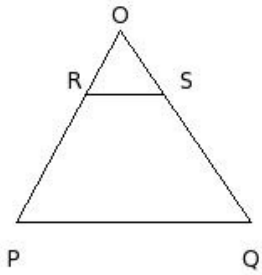
Grade : SSC Grade X

1. In the given figure, $NO \parallel LM$. If $\frac{KN}{NL} = \frac{5}{2}$ and $KM = 15.1$ cm, find KO



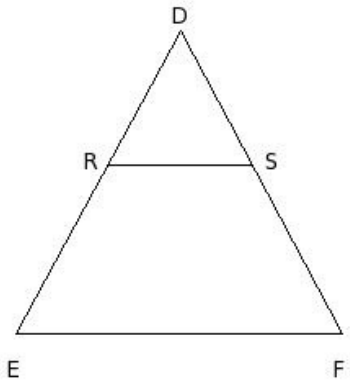
(i) 9.79 cm (ii) 10.79 cm (iii) 12.79 cm (iv) 8.79 cm (v) 11.79 cm

2. In the given figure, $RS \parallel PQ$.
If $OR = 4.43$ cm, $OP = 13.3$ cm and $OQ = 14.1$ cm, find OS



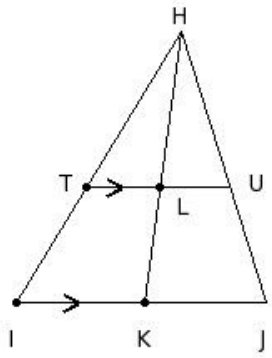
(i) 6.70 cm (ii) 2.70 cm (iii) 4.70 cm (iv) 3.70 cm (v) 5.70 cm

3. In the given figure, RS ∥ EF and DR = 12.6 cm, DE = 21 cm and EF = 20 cm, find RS



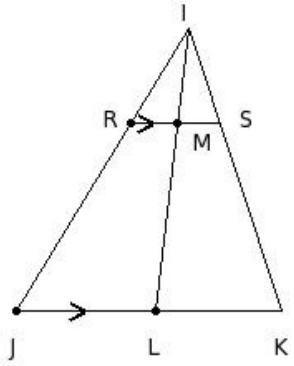
(i) 11.0 cm (ii) 13.0 cm (iii) 12.0 cm (iv) 10.0 cm (v) 14.0 cm

4. In the given figure, TU ‖ IJ , and median HK bisects TU.
If HI = 19 cm, HK = 19 cm and HT = 10.86 cm, TI =



(i) 6.14 cm (ii) 8.14 cm (iii) 7.14 cm (iv) 9.14 cm (v) 10.14 cm

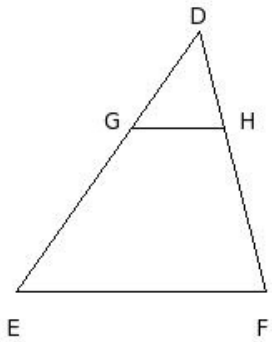
5. In the given figure, RS ‖ JK , and median IL bisects RS.
If IL = 17.1 cm, IM = 5.7 cm and IS = 6 cm, IK =



(i) 18.00 cm (ii) 19.00 cm (iii) 17.00 cm (iv) 20.00 cm (v) 16.00 cm

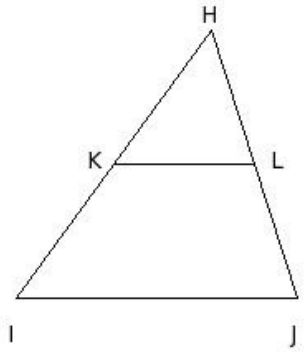
6. In the given figure, G and H are points on the sides DE and DF respectively of △DEF.For which of the following cases, GH ‖ EF

a) DE = 19 cm, GE = 11.88 cm, DH = 8 cm and DF = 16 cm
b) DE = 19 cm, DG = 9.12 cm, DF = 16 cm and HF = 10 cm
c) DG = 7.12 cm, GE = 11.88 cm, DH = 6 cm and HF = 10 cm
d) DE = 19 cm, GE = 11.88 cm, DF = 16 cm and DH = 6 cm



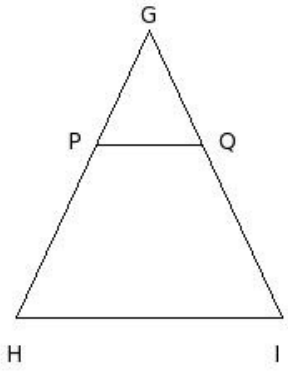
(i) {a,b,c} (ii) {b,d} (iii) {a,c} (iv) {a,d,c} (v) {c,d}

7. In the given $\triangle HIJ$, $KL \parallel IJ$. If $HK : KI = 10\text{ cm} : 10\text{ cm}$ and $HJ = 17\text{ cm}$, $LJ =$



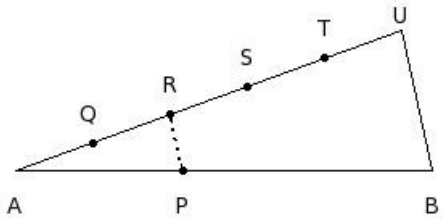
(i) 10.50 cm (ii) 7.50 cm (iii) 6.50 cm (iv) 9.50 cm (v) 8.50 cm

8. In the given figure, $\triangle GHI$, $PQ \parallel HI$ such that area of $\triangle GPQ$ = area of $PQIH$. Find $\frac{GP}{GH}$



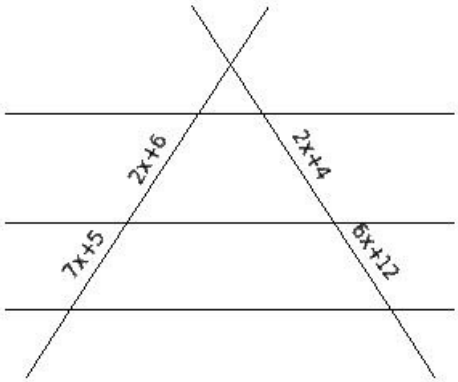
(i) $\frac{1}{2}\sqrt{\frac{4}{2}}$ (ii) $\frac{1}{2}\sqrt{5}$ (iii) 1 (iv) $\frac{1}{2}\sqrt{\frac{1}{2}}$ (v) $\frac{1}{2}\sqrt{2}$

9. In the given figure, if A, Q, R, S, T, U are equidistant and $RP \parallel UB$ and $AB = 26\text{ cm}$ and $AP = 10\text{ cm}$. Find PB



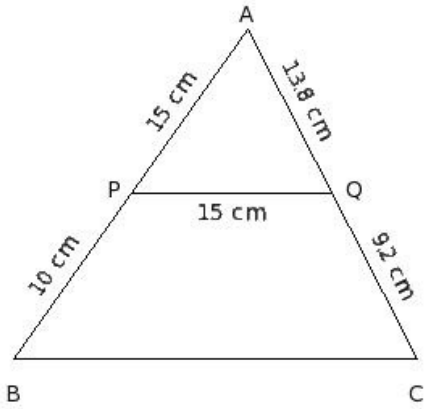
(i) 18.00 cm (ii) 16.00 cm (iii) 17.00 cm (iv) 14.00 cm (v) 15.00 cm

10. From the given figure and values, find x



(i) (13,-3) (ii) (13,-2) (iii) (14,-1) (iv) (15,-2) (v) (0,15)

11. If the measures are as shown in the given figure, find BC



(i) 23.0 cm (ii) 27.0 cm (iii) 25.0 cm (iv) 24.0 cm (v) 26.0 cm

Assignment Key

1) (ii)	2) (iii)	3) (iii)	4) (ii)	5) (i)	6) (v)
7) (v)	8) (v)	9) (ii)	10) (ii)	11) (iii)	