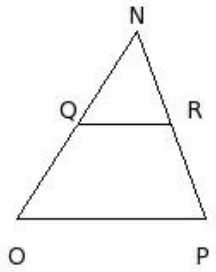
EduSahara™ Assignment

Name : Basic Proportionality Theorem

Chapter : Similar Triangles

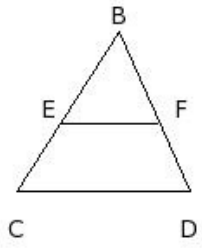
Grade : SSC Grade X

1. In the given figure, $QR \parallel OP$. If $\frac{NQ}{QO} = \frac{1}{1}$ and $NP = 11.9$ cm, find NR



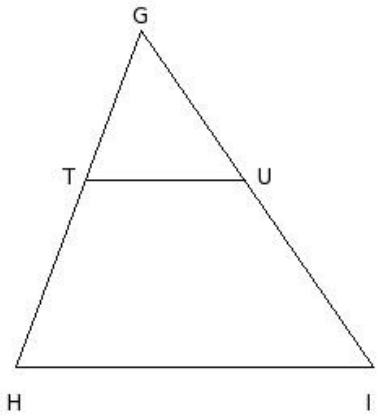
(i) 4.95 cm (ii) 5.95 cm (iii) 3.95 cm (iv) 6.95 cm (v) 7.95 cm

2. In the given figure, $EF \parallel CD$.
If $BE = 6.51$ cm, $BC = 11.4$ cm and $BD = 10.7$ cm, find BF



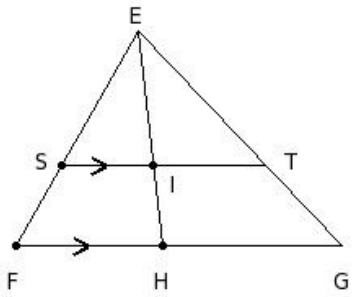
(i) 4.11 cm (ii) 6.11 cm (iii) 5.11 cm (iv) 7.11 cm (v) 8.11 cm

3. In the given figure, TU ∥ HI and GT = 13.2 cm, GH = 22 cm and HI = 22 cm, find TU



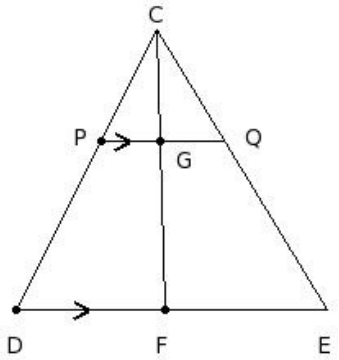
(i) 13.2 cm (ii) 12.2 cm (iii) 14.2 cm (iv) 11.2 cm (v) 15.2 cm

4. In the given figure, ST ∥ FG , and median EH bisects ST.
If EF = 15 cm, EH = 15.1 cm and ES = 9.38 cm, SF =



(i) 7.62 cm (ii) 4.62 cm (iii) 6.62 cm (iv) 5.62 cm (v) 3.62 cm

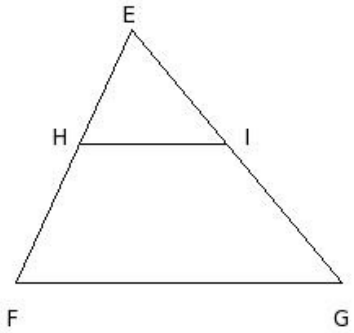
5. In the given figure, PQ ∥ DE , and median CF bisects PQ.
If CE = 20 cm, CG = 6.84 cm and CQ = 8 cm, CF =



(i) 16.10 cm (ii) 19.10 cm (iii) 15.10 cm (iv) 18.10 cm (v) 17.10 cm

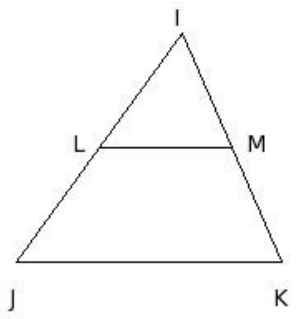
6. In the given figure, H and I are points on the sides EF and EG respectively of △EFG.For which of the following cases, HI ∥ FG

a) EF = 17 cm, HF = 9.27 cm, EI = 11.09 cm and EG = 20 cm
b) EF = 17 cm, EH = 9.73 cm, EG = 20 cm and IG = 10.91 cm
c) EH = 7.73 cm, HF = 9.27 cm, EI = 9.09 cm and IG = 10.91 cm
d) EF = 17 cm, HF = 9.27 cm, EG = 20 cm and EI = 9.09 cm



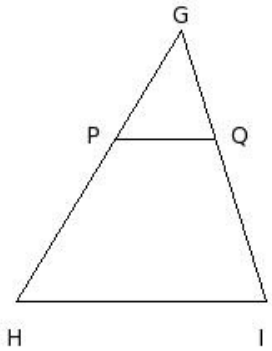
(i) {a,b,c} (ii) {b,d} (iii) {c,d} (iv) {a,c} (v) {a,d,c}

7. In the given △IJK, LM ∥ JK. If IL : LJ = 8.5 cm : 8.5 cm and IK = 15 cm, MK =



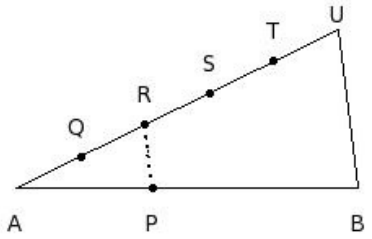
(i) 9.50 cm (ii) 7.50 cm (iii) 6.50 cm (iv) 8.50 cm (v) 5.50 cm

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



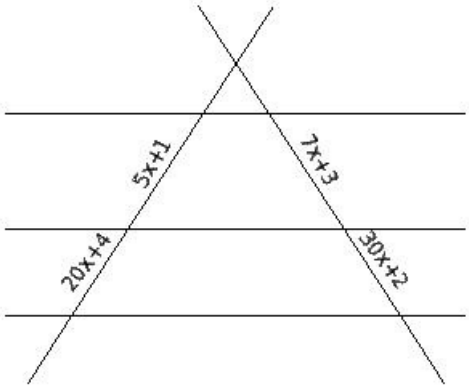
(i) $\frac{1}{2}\sqrt{2}$ (ii) $\frac{1}{2}\sqrt{\frac{1}{2}}$ (iii) $\frac{1}{2}\frac{4}{\sqrt{2}}$ (iv) 1 (v) $\frac{1}{2}\sqrt{5}$

9. In the given figure, if A, Q, R, S, T, U are equidistant and RP ∥ UB and AB = 21 cm and AP = 8 cm. Find PB



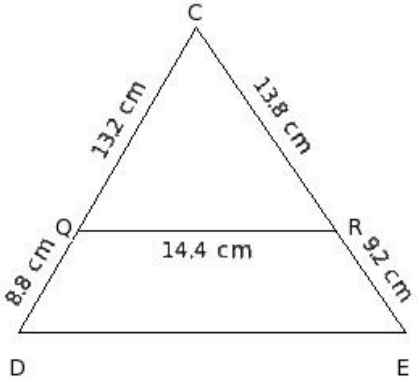
(i) 15.00 cm (ii) 12.00 cm (iii) 11.00 cm (iv) 13.00 cm (v) 14.00 cm

10. From the given figure and values, find x



(i) $(6,(\frac{-1}{7}))$ (ii) $(8,(\frac{-1}{5}))$ (iii) $(5,(\frac{-1}{3}))$ (iv) $(5,(\frac{-1}{5}))$ (v) $(\frac{14}{5},7)$

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



(i) 22.0 cm (ii) 23.0 cm (iii) 24.0 cm (iv) 26.0 cm (v) 25.0 cm

Assignment Key

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