

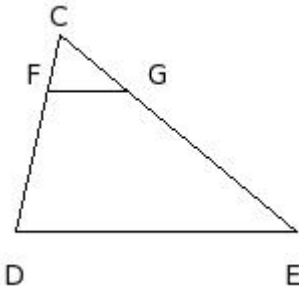
EduSahara™ Learning Center Assignment

Grade : Class X, SSC

Chapter : Similar Triangles

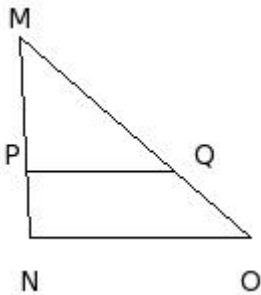
Name : Basic Proportionality Theorem

1. In the given figure, $FG \parallel DE$. If $\frac{CF}{FD} = \frac{2}{5}$ and $CE = 15.8$ cm, find CG



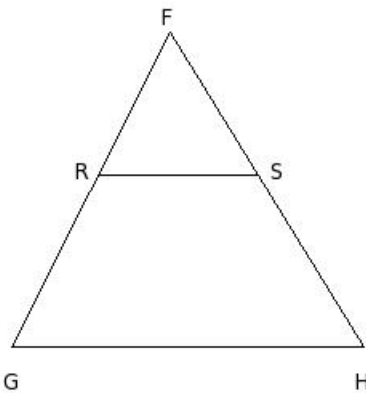
- (i) 6.51 cm (ii) 5.51 cm (iii) 3.51 cm (iv) 2.51 cm (v) 4.51 cm

- In the given figure, $PQ \parallel NO$.
2. If $MP = 6.73$ cm, $MN = 10.1$ cm and $MO = 15.9$ cm, find MQ



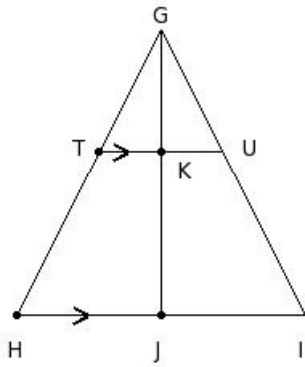
- (i) 12.60 cm (ii) 8.60 cm (iii) 10.60 cm (iv) 11.60 cm (v) 9.60 cm

3. In the given figure, $RS \parallel GH$ and $FG = 22$ cm, $RS = 13.2$ cm and $GH = 22$ cm, find FR



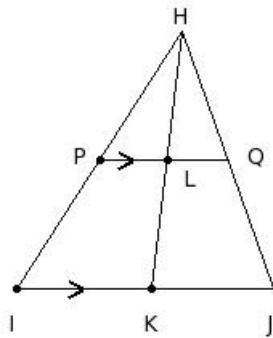
- (i) 15.2 cm (ii) 14.2 cm (iii) 13.2 cm (iv) 12.2 cm (v) 11.2 cm

- In the given figure, $TU \parallel HI$, and median GJ bisects TU .
4. If $GH = 20$ cm, $GJ = 19.9$ cm and $GT = 8.57$ cm, $GK =$



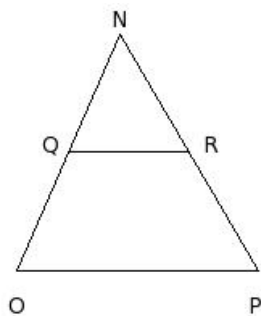
- (i) 6.53 cm (ii) 7.53 cm (iii) 8.53 cm (iv) 9.53 cm (v) 10.53 cm

5. In the given figure, $PQ \parallel IJ$, and median HK bisects PQ .
If $HK = 16.1$ cm, $HJ = 17$ cm and $HQ = 8.5$ cm, $HL =$



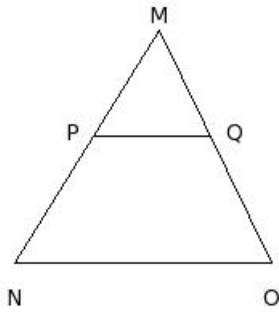
- (i) 7.05 cm (ii) 10.05 cm (iii) 9.05 cm (iv) 6.05 cm (v) 8.05 cm

6. In the given figure, Q and R are points on the sides NO and NP respectively of $\triangle NOP$. For which of the following cases, $QR \parallel OP$
- $NQ = 8$ cm, $QO = 8$ cm, $NR = 8.5$ cm and $RP = 8.5$ cm
 - $NO = 16$ cm, $NQ = 10$ cm, $NP = 17$ cm and $RP = 8.5$ cm
 - $NO = 16$ cm, $QO = 8$ cm, $NR = 10.5$ cm and $NP = 17$ cm
 - $NO = 16$ cm, $QO = 8$ cm, $NP = 17$ cm and $NR = 8.5$ cm



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

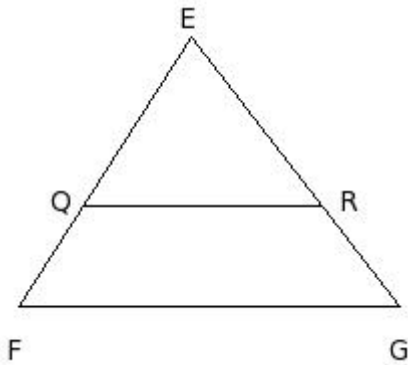
7. In the given $\triangle MNO$, $PQ \parallel NO$. If $MP : PN = 7.73$ cm : 9.27 cm and $MO = 16$ cm, $QO =$



- (i) 7.73 cm (ii) 6.73 cm (iii) 9.73 cm (iv) 10.73 cm (v) 8.73 cm

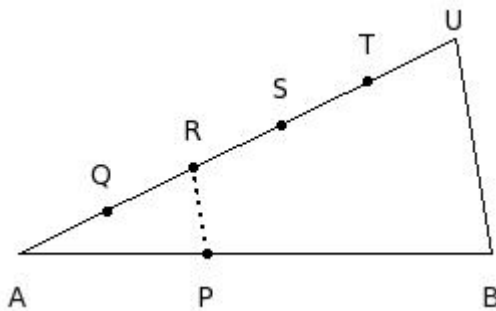
In the given figure, $\triangle EFG$, $QR \parallel FG$ such that

8. area of $\triangle EQR = \text{area of } QRGF$. Find $\frac{EQ}{EF}$



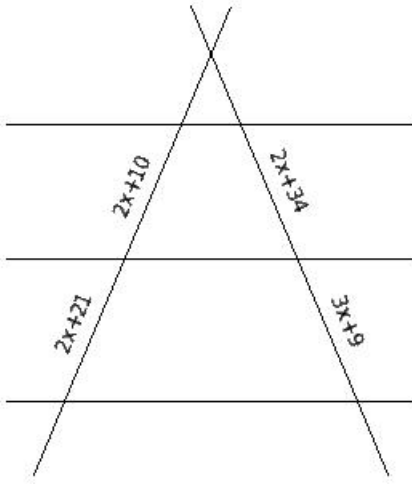
- (i) $\frac{1}{2} \sqrt{2}$ (ii) $\frac{1}{2} \sqrt{2}$ (iii) $\frac{1}{2} \sqrt{\frac{1}{2}}$ (iv) 1 (v) $\frac{1}{2} \sqrt{4}$

9. In the given figure, if A, Q, R, S, T, U are equidistant and $RP \parallel UB$ and $AB = 24$ cm and $AP = 10$ cm. Find PB



- (i) 13.00 cm (ii) 12.00 cm (iii) 14.00 cm (iv) 15.00 cm (v) 16.00 cm

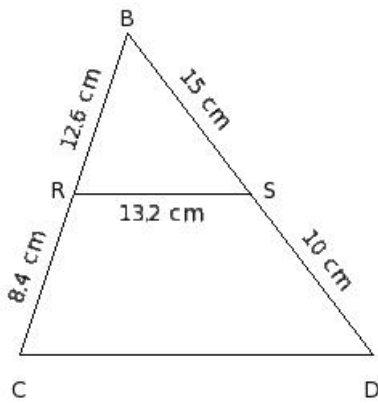
10. From the given figure and values, find x



(i) (41 , -6) (ii) (-7 , 40) (iii) (-5 , 39)

(iv) (-8 , 39) (v) (-8 , 38)

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



(i) 23.0 cm (ii) 21.0 cm (iii) 20.0 cm (iv) 24.0 cm (v) 22.0 cm

Assignment Key

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