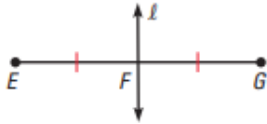


Unit 1- Worksheet #3: Use Midpoint and Distance Formula

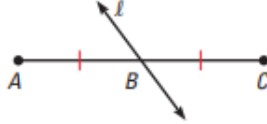
1. Explain what it means to bisect a line segment. Why is it impossible to bisect a line?

Line l bisects the segment. Find the indicated measure. Show your work!

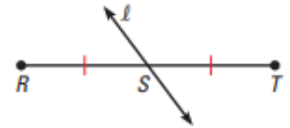
2. Find EG if $EF = 13\text{ cm}$



3. Find BC if $AC = 19\text{ cm}$



4. Find RT if $RS = 5\text{ cm}$



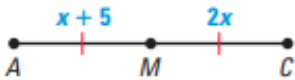
5. Line RS bisects \overline{PQ} a point R.
Find RQ if $PQ = 14\text{ cm}$

6. Line JK bisects \overline{MN} a point J.
Find MN if $JM = 6.75\text{ ft}$

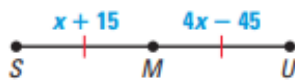
7. Point C bisects \overline{AB} . Find CB if $AB = 14.8\text{ meters}$

In the diagram, M is the midpoint of the segment. Find the indicated length. Show your work!

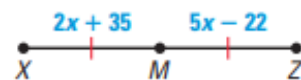
8. Find AM



9. Find SU



10. Find XZ



Find the coordinates of the midpoint of the segment with the given endpoints. Show your work!

11. C(3, 5) and D(7, 5)

12. G(-4, 4) and H(6, 4)

13. P(-8, -7) and Q(11, 5)

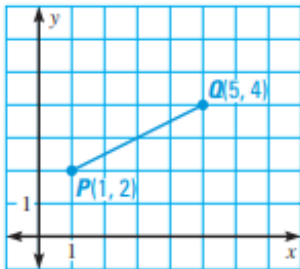
Use the given endpoint R and midpoint M of \overline{RS} to find the coordinates of the other endpoint S. Show your work!

14. R(3, 0) and M(0, 5)

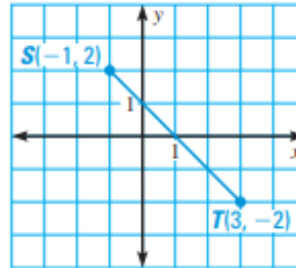
15. R(4, -6), M (-7, 8)

Find the length of the segment. Round to the nearest tenth of a unit. Show your work!

16.

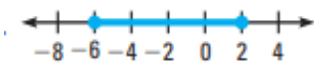


17.

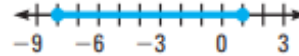


Find the length of the segment. Then find the coordinate of the midpoint of the segment. Show your work!

18.



19.



The endpoints of two segments are given. Find each segment length- round to the nearest tenth. Tell whether the segments are congruent. Show your work!

20. \overline{AB} : A(0, 2), B(-3, 8)

\overline{CD} : C(-2, 2), D(0, -4)

21. \overline{JK} : J(-4, 0), K(4, 8)

\overline{LM} : L(-4, 2) M(3, -7)