

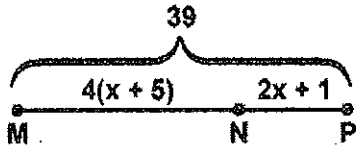
Unit 2

Algebra Practice with Segment Addition and Midpoint
Geometry

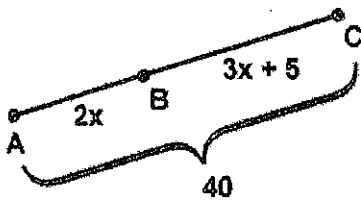
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Date: _____ Period: _____

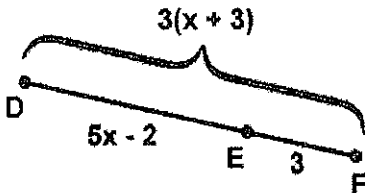
1. Using the diagram shown, find the value of x .



2. Using the diagram shown, find AB and BC .



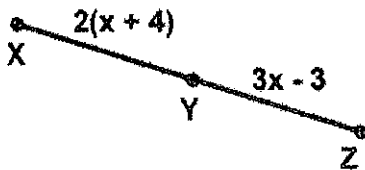
3. Using the diagram shown, find DE and DF .



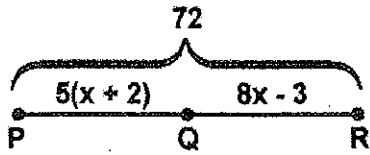
4. In the given diagram, L is the midpoint of \overline{KM} . Find the value of x .



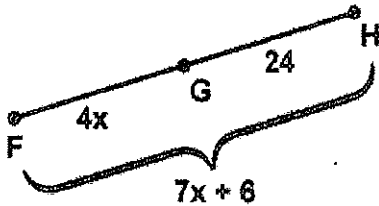
5. In the given diagram, Y is the midpoint of \overline{XZ} . Find XZ .



6. Is Q the midpoint of \overline{PR} ?

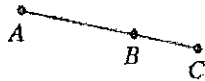


7. Is G the midpoint of \overline{FH} ?



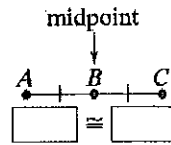
Segment Addition Postulate:

If three points A , B , and C are collinear and B is between A and C , then



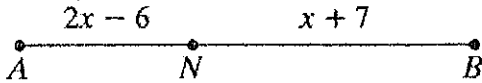
Definition of midpoint:

A midpoint is a point that divides a segment into



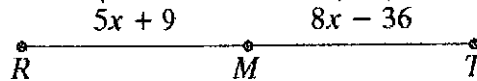
8. Use the Segment Addition Postulate to write an equation and solve for x .

If $AB = 25$, find the value of x . Then find AN and NB .

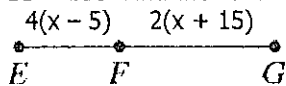


9. Use the definition of midpoint to write an equation and solve for x .

M is the midpoint of \overline{RT} . Find RM , MT , and RT .



10. $EG = 100$. Find the value of x . Then find EF and FG .



11. Z is the midpoint of \overline{XY} , and $XY = 27$.

Draw and label a picture, including congruency marks. Then find XZ .

12. M is the midpoint of \overline{PQ} . $MQ = 5x + 8$ and $PQ = 6x + 56$, find PM .