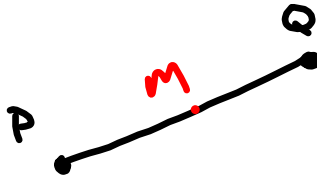


Section 1.5 Segment Relationships

Obj: Find the midpoint of a segment
Identify and use congruent segments

Midpoint - a point on a segment in the middle



M is the midpoint

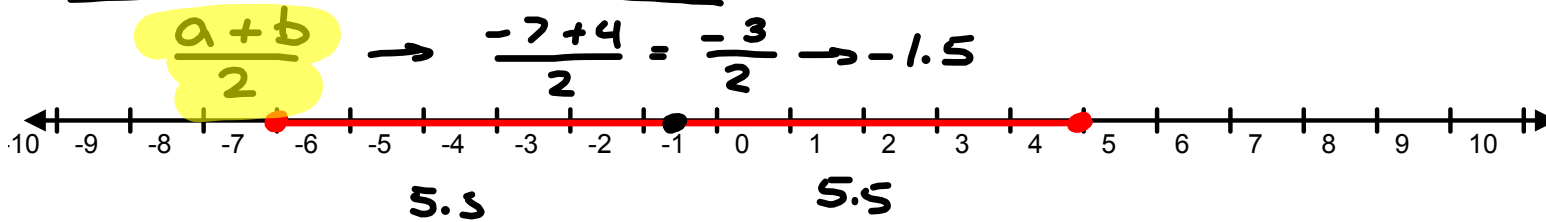
$$PM = 5, MQ = 5$$

$$\overline{PM} \cong \overline{MQ}$$

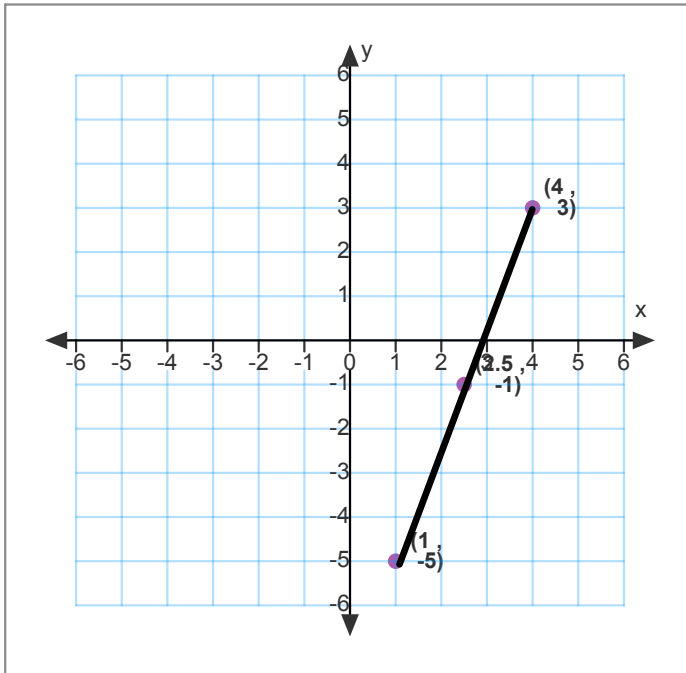
$$PQ = 10, PM = 5$$

\cong → Congruent
equal ← ↓
 same

Midpoint on a number line



Midpoint on coordinate plane



$$M = \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

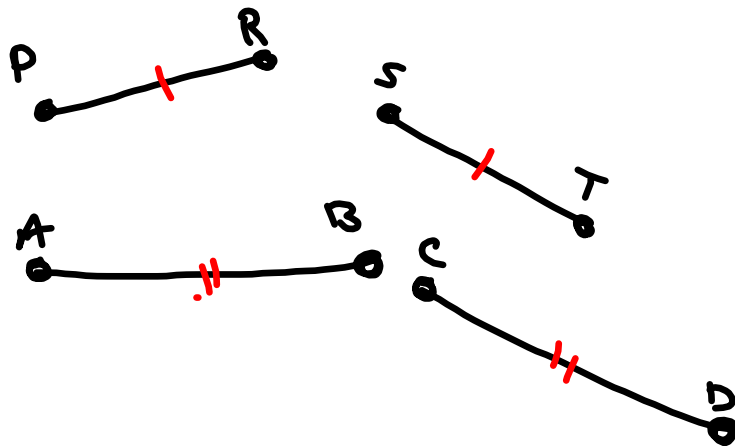
$$M = \left(\frac{4+1}{2}, \frac{3+(-5)}{2} \right)$$

$$M = (2.5, -1)$$

Segment Bisector

- a point, line, line segment, or plane which passes through the midpoint of a segment and creates two congruent segments

Congruent Segments



pg 32

1-4

19-28 all

30, 33-37 all, 48