

SECTION 1.3: USING MIDPOINT AND DISTANCE

Homework: _____

Learning Targets:

- 1d. Understanding of working with angle and segment bisectors to determine missing measures.
- 1e. Understanding of how to determine the midpoint of segments on a coordinate plane.
- 1f. Understanding of how to use the distance formula to calculate the length of a segment.

Vocabulary:

Bisect

Distance Formula

Midpoint Formula

Find each measure.

- 1. \overline{AB} bisects \overline{CD} at E. Find CE if $CD = 12$ and $AE = 5$.
- 2. \overline{AE} is bisected by \overline{BC} at F. Find AE if $BC = 14$ and $FE = 7$.
- 3. \overline{DE} bisects \overline{AB} at C. Solve for x if $AC = 2x + 6$ and $CB = 18$.
- 4. \overline{DE} is bisected by \overline{AB} at C. Solve for x if $DE = 12$ and $DC = x - 5$.

Find the distance and midpoint of each segment.

- 5. A(-3, 2), B(4, -1)
- 6. C(4, -2, 1), D(-2, -3, 4)