- 1. Using the distance formula find the distance between points R(-2, -8) and P (-7, -3).
- 2. Using the distance formula find the distance between points L(-6, 1) and E(4, 5).
- 3. Find the length of WL. (DISTANCE) If W (-2,3) and L (-1, 4).

Use the Midpoint formula.

- 4. Find the midpoint, M, of segment AB, if A (-4, 10) and B (2, 8)
- 5. Find the midpoint, M, of segment DF, if D(3, 7) and F(-6, -1)
- 6. P is the midpoint of segment KR. If P (7,-5) and R (4, -2), find the coordinates of point K.
- 9. K is the midpoint of segment LM. If K (2,4) and L (-1, -1), find the coordinates of point M.
- 10. Find the midpoint of PU with P(3, -1) and U(5, 2).

11. *D* is the midpoint of  $\overline{CF}$  for the points *C* (4, -1) and *F*(2,5). Find *DF*.

12. *D* is the midpoint of  $\overline{CF}$  for the points *C* (-2, 6) and *F*(4, 7). Find *DF*.

## Use the following word problem to answer questions 13-15.

Maria and Jackson live in adjacent neighborhoods. If they superimpose a coordinate grid on the map of their neighborhoods, Maria lives at (-8, 1) and Jackson lives at (3, -3). Each unit on the grid is equal to approximately 0.132 mile.

- 13. How far apart do Maria and Jackson live?
- 14. If April lives equidistant to both Maria and Jackson, at what coordinate on the grid would she live?
- 15. How far apart would Maria and April live?