Handout 5: Cartesian Coordinated Answers

For questions 1-4, calculate the distance between the two points.

1. $C(4,8)$ and $D(8,-4)$.
   $4\sqrt{10}$

2. $L(4,6)$ and $M(7,3)$
   $3\sqrt{2}$

3. $R(-5,3)$ and $S(-10,15)$
   13

4. $W(9,16)$ and $Z(20,5)$
   $11\sqrt{2}$

For questions 5-6, find the coordinates of the midpoint of the segment with the given endpoints.

5. $(4,8)$ and $(8,-4)$
   $(6,2)$

6. $(-5,3)$ and $(-10,15)$
   $(-7.5,9)$

7. Is $(5.5,5.5)$ the midpoint of the segment with endpoints $(4,6)$ and $(7,3)$?
   No

8. Is $(14.5,11.5)$ the midpoint of the segment with endpoints $(9,16)$ and $(20,5)$?
   No

9. If a line segment has one endpoint at $(5,9)$ and a midpoint at $(12,4)$, where is the other endpoint?
   $(19,-1)$

10. If a line segment has one endpoint at $(9,-5)$ and a midpoint at $(3,0)$, where is the other endpoint?
    $(-3,5)$