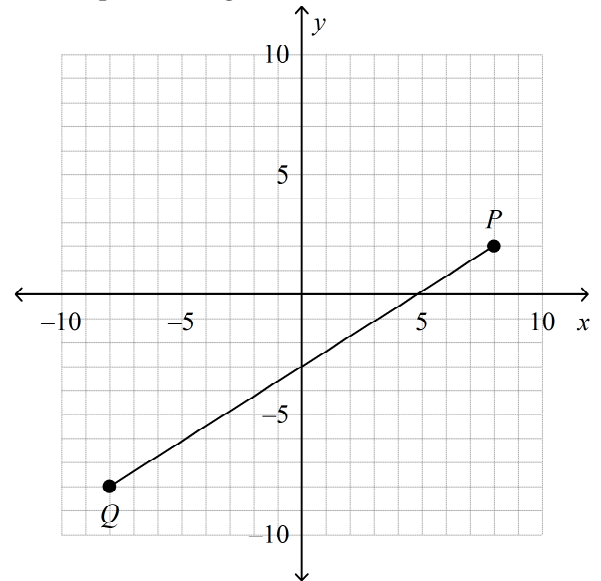# Midpoint and Distance Day 2 Homework

Multiple Choice
Identify the choice that best completes the statement or answers the question.
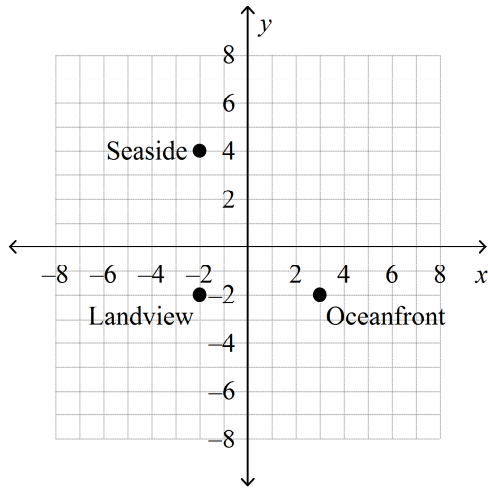
1. *M* is the midpoint of $\overline{CF}$ for the points *C*(3, 5) and *F*(9, 3). Find *MF*.
    a. $2\sqrt{10}$
    b. 10
    c. 20
    d. $\sqrt{10}$

2. A high school soccer team is going to Columbus to see a professional soccer game. A coordinate grid is superimposed on a highway map of Ohio. The high school is at point (3, 4) and the stadium in Columbus is at point (7, 1). The map shows a highway rest stop halfway between the cities. What are the coordinates of the rest stop? What is the approximate distance between the high school and the stadium? (One unit ~ 2.3 miles.)
    a. $\left(5, \dfrac{5}{2}\right)$, 11.5 miles
    b. $\left(\dfrac{3}{2}, \dfrac{5}{2}\right)$, 57.5 miles
    c. $\left(5, \dfrac{5}{2}\right)$, 5 miles
    d. $\left(\dfrac{3}{2}, \dfrac{5}{2}\right)$, 5.75 miles

3. Find the midpoint of $\overline{PQ}$.

    a. (0, –3)
    b. (0, –2)
    c. (–1, –3)
    d. (–1, –2)

4. Each unit on the map represents 5 miles. What is the actual distance from Oceanfront to Seaside?
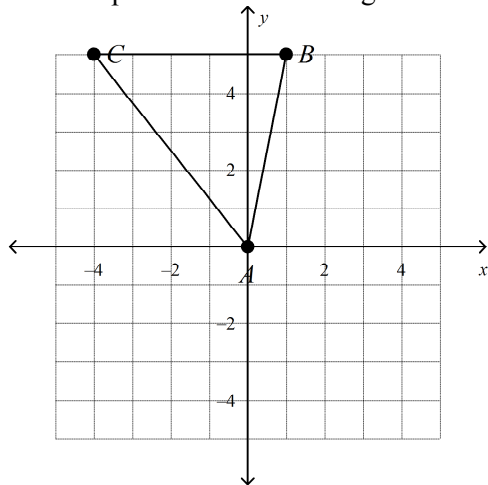

   a. about 40 miles
   b. 50 miles
   c. 10 miles
   d. about 8 miles

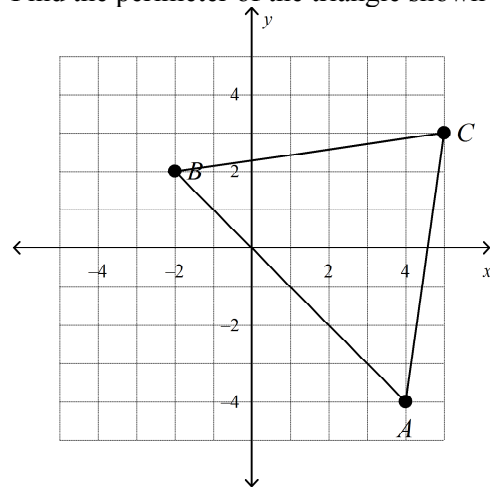5. Find the coordinates of the midpoint of the segment whose endpoints are $H(2, 9)$ and $K(4, 5)$.
   a. $(6, 14)$
   b. $(2, 4)$
   c. $(1, 2)$
   d. $(3, 7)$

Short Answer

6. P is the midpoint of segment KR. If P (7,-5) and R (4, -2), find the coordinates of point K.

7. K is the midpoint of segment LM. If K (2,4) and L (-1, -1), find the coordinates of point M.

8. Find the perimeter of the triangle shown below.

9. Find the perimeter of the triangle shown below.

10. You live in Salt Lake City, Utah, which has approximate (latitude, longitude) coordinates of (41N, 112W). Your friend lives in Goodwin, Arkansas, with coordinates of (35N, 91W). You plan to meet halfway between the two cities. Find the coordinates of the halfway point.

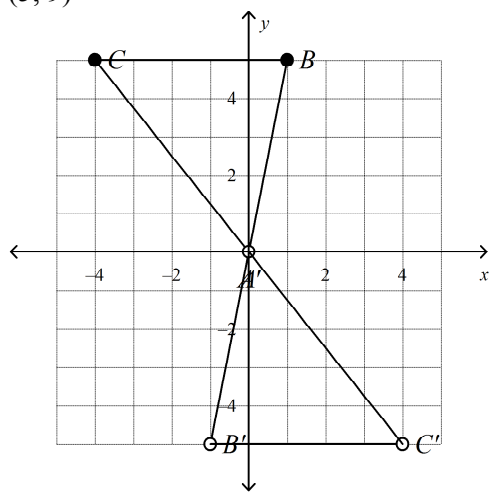# Midpoint and Distance Day 2 Homework
Answer Section
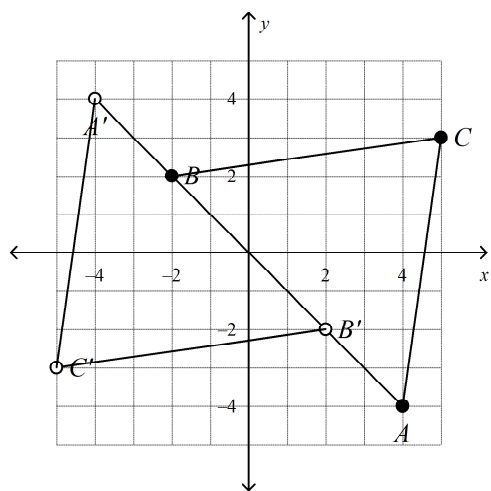
MULTIPLE CHOICE

1. D
2. A
3. A
4. A
5. D

SHORT ANSWER

6. (10, -8)
7. (5, 9)

8.

9.

10. (38N, 101.5W)