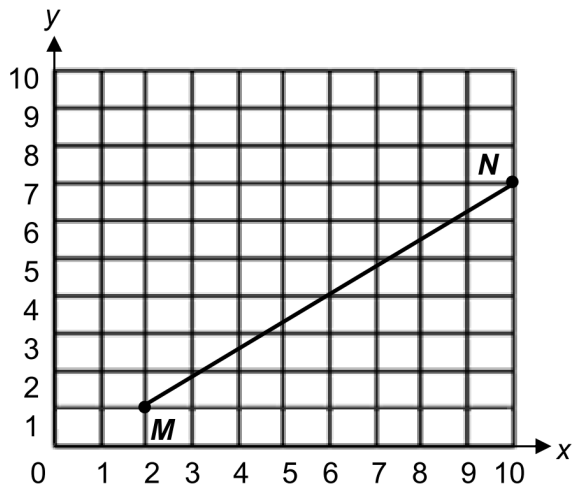


## Unit 6 - Distance Formula

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. Look at  $\overline{MN}$  on the coordinate plane.



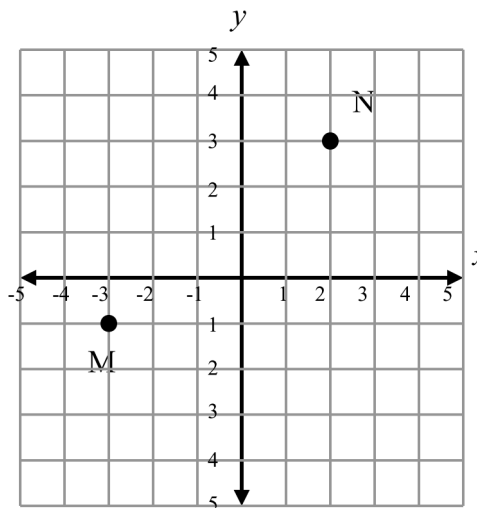
What is the distance between the endpoints of  $\overline{MN}$ ?

- A. 5 units                      B. 6 units  
 C. 8 units                      D. 10 units
2. Segment  $ST$  has endpoints (6, 2), and (1, 14).  
 What is the distance between these two endpoints?
- A. 5 units                      B. 6 units  
 C. 12 units                      D. 13 units
3. Segment  $QR$  has endpoints at (-1, -2) and (2, 2).  
 What is the distance between these two endpoints?
- A. 3 units                      B. 4 units  
 C. 5 units                      D. 6 units

4. What is the distance between the points (4, -2) and (-5, 3)?

- A.  $D = \sqrt{106}$                       B.  $D = \sqrt{28}$   
 C.  $D = \sqrt{26}$                       D.  $D = \sqrt{2}$

5. What is the distance between points  $M(-3, -1)$  and  $N(2, 3)$  on the graph below?



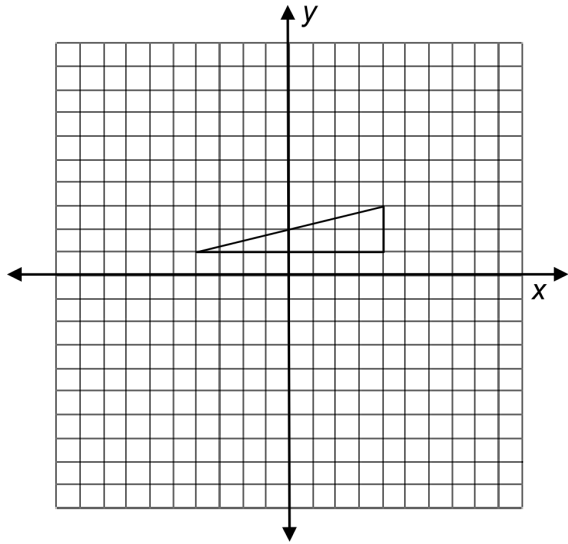
- A.  $\sqrt{5}$                       B.  $\sqrt{17}$                       C.  $\sqrt{41}$                       D.  $\sqrt{45}$

6. What is the length of the line segment that has endpoints at (-5, 3) and (4, 5)?

- A.  $\sqrt{121}$                       B.  $\sqrt{85}$                       C.  $\sqrt{65}$                       D.  $\sqrt{11}$

Unit 6 - Distance Formula

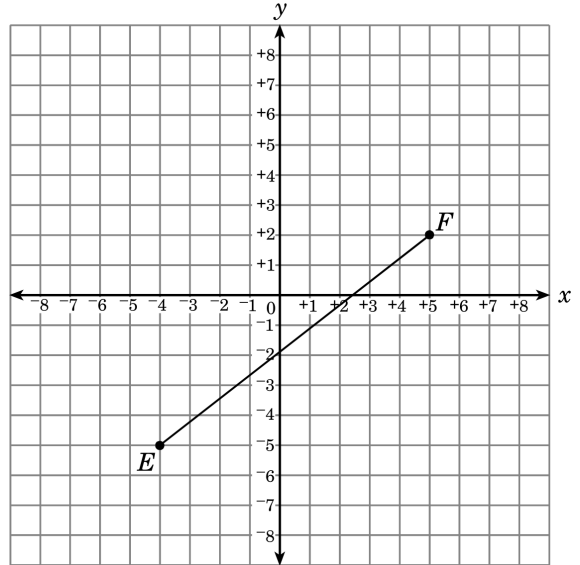
7. The coordinates  $(-4, 1)$  and  $(4, 3)$  are two vertices of a right triangle on a coordinate plane.



What are the coordinates of the midpoint of the two vertices?

- A.  $(4, 1)$    B.  $(0, 2)$    C.  $(2, 0)$    D.  $(1, 4)$

8. What is the length of  $\overline{EF}$ ?



- A.  $\sqrt{10}$  units                      B.  $\sqrt{130}$  units  
 C.  $2\sqrt{34}$  units                      D.  $4\sqrt{34}$  units

1.  
Answer:      D
2.  
Answer:      D
3.  
Answer:      C
4.  
Answer:      A
5.  
Answer:      C
6.  
Answer:      B
7.  
Answer:      B
8.  
Answer:      B