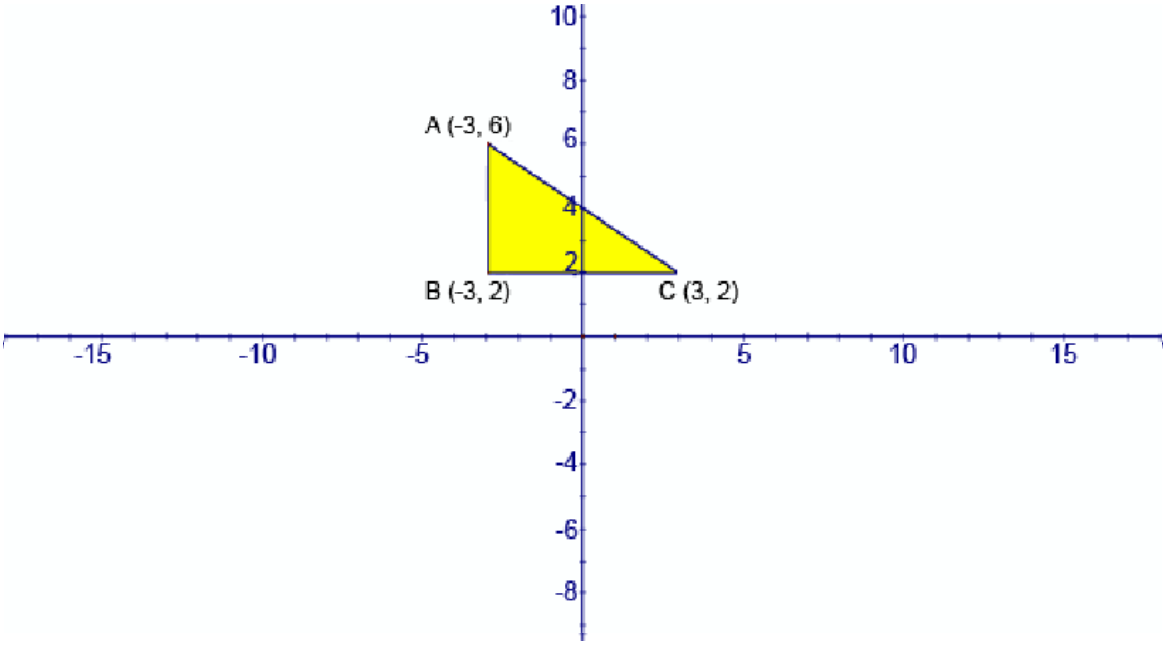
Geometry
Writing Assignment: Distance and Midpoint Formulas
Each problem is worth 5 points
Total Points: 50

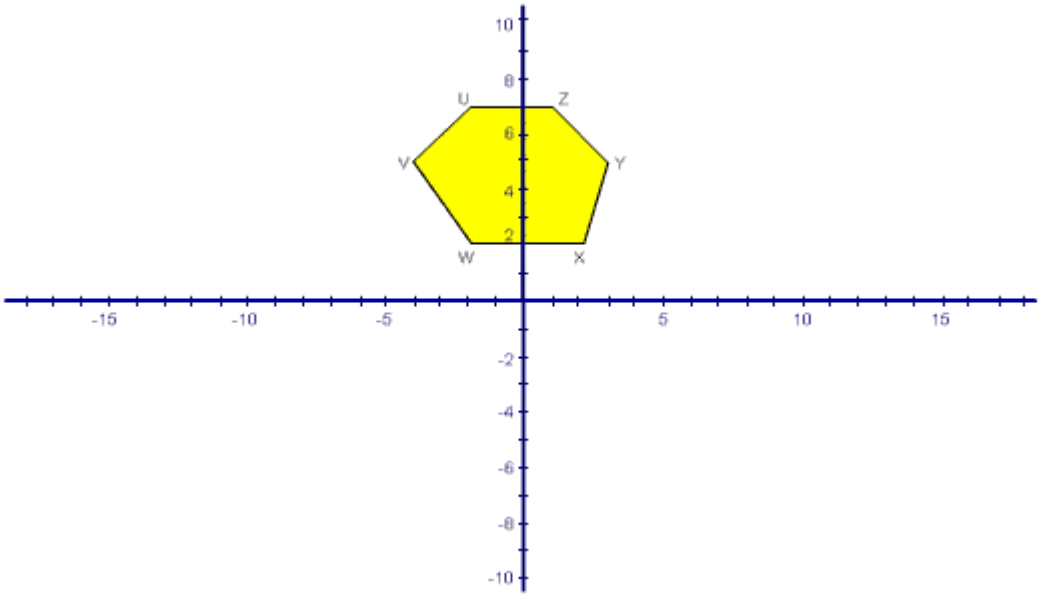
Distance Formula

1. Find the distance between the points (-4, 6) and (8, -12).Round your solution to 2 decimal points.

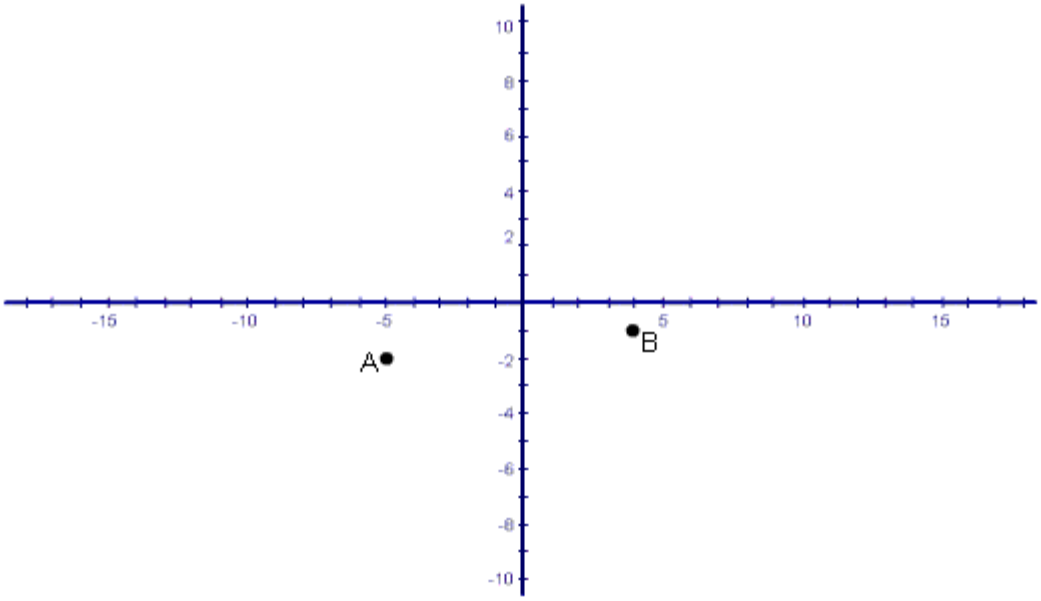
2. Find the perimeter of the triangle below. Round your solution to 2 decimal points.



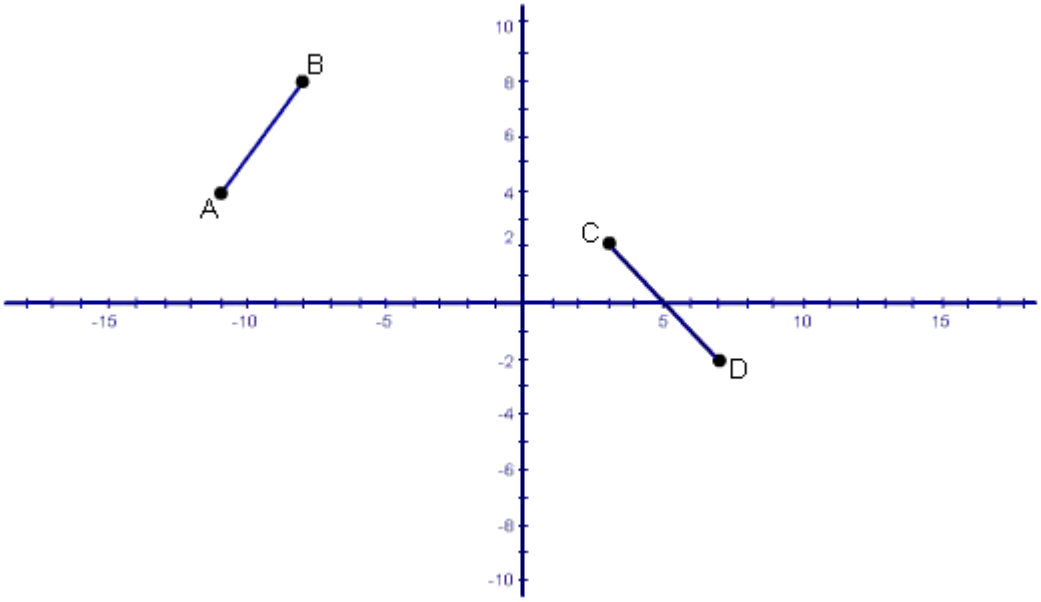
3. Find the length of diagonal XU in the hexagon below. Round your solution to 2 decimal points.



4. Find the distance between the two points. Round your solution to 2 decimal points.



5. How much longer is $\overline{CD}$ compared to $\overline{AB}$? Round your solution to 2 decimal points.

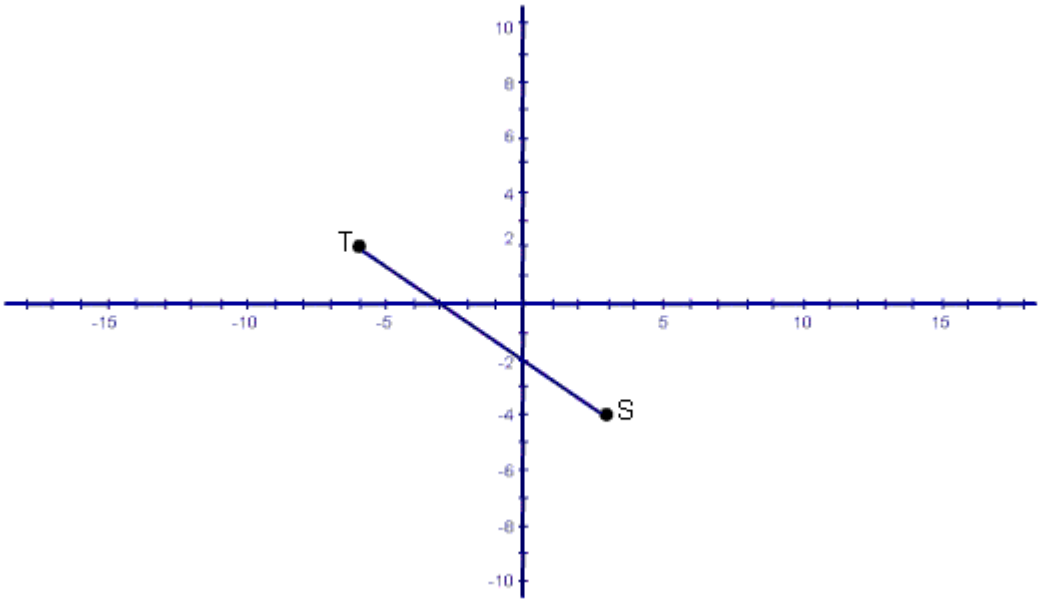


Midpoint Formula

6. Find the coordinates of the midpoint of $\overline{AB}$. A (12, -7) and B (-4, 7).

7. M is the midpoint of $\overline{JK}$. The coordinates of J are (6, 3) and the coordinates of M are (-3, 4), find the coordinates of K.

8. Find the midpoint of $\overline{TS}$.



9. If the midpoint between (x, 6) and (-9, 14) is (8, 10), find the value of x.

10. L is the midpoint of $\overline{CD}$. If $\overline{CL} = \frac{1}{3}x + 8$ and $\overline{LD} = \frac{2}{3}x - 4$, find the length of $\overline{CD}$.