

Geometry – Unit 1 Extension

Distance & Midpoint

8.G.B.8, G.CO.A.1, G.GPE.B.4, G.GPE.B.6

Name: _____!

Date: _____ Pd: _____

1. Name a point that is $\sqrt{2}$ away from $(-1, 5)$.
2. Name a point that is between 50 and 60 units away from $(7, -2)$ and state the distance between the two points.
3. If the distance from $(x, 3)$ to $(4, 7)$ is $\sqrt{41}$, what is the value of x ?
4. **Perimeter:** The coordinates of the vertices of a quadrilateral are $W(-1, 3)$, $X(3, 3)$, $Y(5, -1)$, and $Z(-2, -1)$. Find the perimeter of the quadrilateral. Round to the nearest tenth.
5. If the midpoint of a line is $(2, 3)$, and one endpoint of the line is the origin find the other endpoint. Show the computations to justify your solution.
6. What are the endpoints of a line that has a midpoint of $(-1, -3)$ and a length of 8. Show the computations to justify your solution.