

Name _____
Mr. Schlansky

Date _____
Geometry

Partitions Practice

1. What are the coordinates of the point on the directed line segment from $M(-8,1)$ to $R(6,8)$ that partitions the segment into a ratio of 3 to 4?

2. Directed line segment TX has endpoints whose coordinates are $T(-6,8)$ and $X(9,-2)$. Determine the coordinates of point J that divides the segment in the ratio 2 to 3.

3. The coordinates of the endpoints of \overline{PO} are $P(7,3)$ and $O(2,-7)$. Point E is on \overline{PO} . Determine and state the coordinates of point E , such that $\overline{PE} : \overline{EO}$ is 4:1.

4. The endpoints of \overline{DF} are $D(4,-2)$ and $F(16,-10)$. Determine and state the coordinates of point E , if $\overline{DE} : \overline{EF} = 3:1$.

5. What are the coordinates of the point on the directed line segment from $H(-9,2)$ to $O(1,17)$ that partitions the segment into a ratio of 3 to 2?

6. Directed line segment JK has endpoints whose coordinates are $J(-1,3)$ and $K(13,10)$. Determine the coordinates of point O that divides the segment in the ratio 2 to 5.

7. What are the coordinates of the point on the directed line segment from $E(18,14)$ to $Z(-2,-2)$ that partitions the segment into a ratio of 1 to 3?

8. Directed line segment MY has endpoints whose coordinates are $M(-3,5)$ and $Y(7,15)$. Determine the coordinates of point U that divides the segment in the ratio 2 to 3.