

Partitioning Line Segments in Two Dimensions Practice Worksheet

Name _____ Class Period _____

1. Given the points $A(-1, 2)$ and $B(7, 14)$, find the coordinates of the point P on directed line segment \overline{AB} that partitions \overline{AB} in the ratio 1:3.
2. Given the points $A(-2, 4)$ and $B(7, -2)$, find the coordinates of the point P on directed line segment \overline{AB} that partitions \overline{AB} in the ratio 1:2.
3. Given the points $A(-3, -4)$ and $B(5, 0)$, find the coordinates of the point P on directed line segment \overline{AB} that partitions \overline{AB} in the ratio 2:3.
4. The map shows a straight highway between two towns. Highway planners want to build two new rest stops between the towns so that the two rest stops divided the highway into three equal parts. Find the coordinates of the points at which the rest stops should be built.

