

## Worksheet #2 Partitioning Segments

Find the point that partitions the segment with the two given endpoints with the given ratio.

1.  $(-3, 4)$   $(7, 6)$  1:1

2.  $(-9, 3)$   $(1, 8)$  2:3

3.  $(8, -5)$   $(4, 7)$  1:3

4.  $(5, -6)$   $(4, 5)$  3:4

5.  $(4, 9)$   $(-5, -3)$  2:3

6.  $(2, -1)$   $(-3, -5)$  1:2

7. Find the coordinates of point P, that lies  $\frac{2}{3}$  of the way on the directed line segment  $\overline{AB}$ , where A  $(-2, 5)$ , B  $(4, 9)$

8. Find the coordinates of point P that lies on the line segment  $\overline{MQ}$ , M $(-9, -5)$ , Q $(3, 5)$ , and partitions the segment at a ratio of 2 to 5