HW
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5) Find the midpoint of a line segment whose endpoints are (-a, 2b) and (3a, 4b).

$$M = \left(\frac{-a+3a}{2}, \frac{2b+4b}{2}\right)$$

$$\left(\frac{2a}{2}, \frac{6b}{2}\right) = \boxed{(a, 3b)}$$

6) If the midpoint of a line segment is M (4, -3), and one endpoint is (-1, 5), find the other endpoint.

(-1, 5)
+5 -8
M (4, -3)
+5 -8
(9, -11)

7) Find the midpoint of a line segment whose endpoints are (5, 3) and (4, 7).

$$M = \left(\frac{5+4}{2}, \frac{3+7}{2}\right)$$

$$= \left(\frac{9}{2}, \frac{10}{2}\right) = \boxed{(4.5, 5)}$$

8) If the midpoint of line segment is M (3, -2) and one endpoint is (3, 4), find the other endpoint.

(3, 4)
-6 -6
M 2 Change (3, -2)
(3, -8)