

4. The midpoint of line segment AB is $M(6, -10)$. If $A(-2, -3)$ is one of the endpoints, what are the **coordinates of the other endpoint**?
(*Hint: solve x, solve y*)

5. Find the **slope** of line segment AB, given $A(-5, -2)$ and $B(3, -6)$.

6. **Write equations** for the following:

a) $(-8, 3)$, $(-1, 4)$

b) *parallel* to $4y - 5x = 6$, x -intercept of -9

c) *perpendicular* to $2x - 3y + 10 = 0$, y -intercept of 6

7. Write the following in **general form**:

a) $m = \frac{4}{-3}$, $(7, -2)$

b) $(10, -2)$, $(4, 6)$

c) *parallel* to $y = \frac{2}{5}x - 4$, *y*-intercept of 3

d) *perpendicular* to $3x - y - 24 = 0$, $(-3, 8)$

8. Short answer questions:

a) Find the **slope**: $3y = 8x - 1$ _____

b) Find the **y-intercept**: $5x - 2y = 8$ _____

c) Find the **perpendicular slope**: $y = \frac{7}{3}x - 5$ _____

d) Write as **slope-intercept**: $9 - 2x - 2y = 0$ _____

e) Find the **parallel slope**: $4x - 6y + 2 = 0$ _____

f) Find the **point on the line**: $y - 2 = 4(x + 1)$ _____

g) Find the **midpoint** of: $(8, -10)$ and $(11, 2)$ _____

h) Simplify: $\sqrt{80}$ _____