

Name: _____ Block: _____

Midpoint and Distance Formula Worksheet

Midpoint Formula: $M\left(\frac{x_1+x_2}{2}, \frac{y_1+y_2}{2}\right)$ for endpoints (x_1, y_1) and (x_2, y_2)

Find the coordinates of the midpoint of the segment with the given endpoints:

1. $C(3,5)$ and $D(7,5)$
2. $G(-4,4)$ and $H(6,4)$

3. $J(-7, -5)$ and $K(-3,7)$

4. $A(0, -10)$ and $B(8,4)$

Distance Formula: $d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$ for endpoints (x_1, y_1) and (x_2, y_2)

Find the length of the segment with the given endpoints:

Remember to leave answers exact by simplifying a radical if needed.

5. $R(-1,1)$ and $S(2,5)$
6. $N(0,6)$ and $T(8,0)$

7. $P(-2,8)$ and $Q(7, -4)$

8. $V(1,3)$ and $W(5,5)$