DISPLACEMENT VECTORS

(1-5) Given points P and Q, find the displacement vector $\overrightarrow{PQ}$.

1. $P = (1,0,3)$ and $Q = (0,2,4)$

2. $P = (2,3,4)$ and $Q = (5,3,8)$

3. $P = (-4,3,-8)$ and $Q = (1,2,3)$

4. $P = (-2,-3,4)$ and $Q = (5,3,8)$

5. $P = (2,3,0)$ and $Q = (2,3,5)$

6. For the points $P = (1,-1,1)$, $Q = (2,-2,2)$, $R = (2,0,1)$, and $S = (3,-1,2)$, does $\overrightarrow{PQ} = \overrightarrow{RS}$?

7. For the points $P = (0,0,0)$, $Q = (1,3,2)$, $R = (1,0,1)$, and $S = (2,3,4)$, does $\overrightarrow{PQ} = \overrightarrow{RS}$?