65 $\overrightarrow{PQ} = \langle 4-2,\ -5-(-3)\rangle = \langle 2,\ -2\rangle = 2\mathbf{i} - 2\mathbf{j}$

$W = \mathbf{F} \bullet \mathbf{D} = (5\mathbf{i} + 3\mathbf{j}) \bullet (2\mathbf{i} - 2\mathbf{j}) = (5)(2) + (3)(-2) = 4$