

## Answer on Question #42414 – Math - Analytic Geometry

**Question:** Determine whether the vectors  $u$  and  $v$  are parallel, orthogonal, or neither.

$$u = \langle 6, -2 \rangle, v = \langle 2, 6 \rangle$$

**Solution:** Compute dot product as the sum of the products of the corresponding entries of the two sequences of numbers :

$$u \cdot v = 6 \cdot 2 + (-2) \cdot 6 = 0, \text{ so}$$

**Answer:** the vectors  $u$  and  $v$  are orthogonal.