Calculate the cross product of vectors A and B in the diagram below by hand.

$$A = [1, 3, 5] \qquad B = [6, 4, 2]$$

$$A \times B = ?$$

$$A \times B = ((3)(2) - (4)(5))\vec{i} + ((5)(6) - (2)(1))\vec{j}$$
$$+ ((1)(4) - (6)(3))\vec{h}$$

$$A \times B = [-14, 28, -14]$$