Question.

Solve the following r1=3i−2j+k, r2=2i−4j−3k, r3=−i+2j+2k. Find r2r3

-16
16
15
-15

Solution.

$$r_1 = (3, -2, 1)$$

$$r_2 = (2, -4, -3)$$

$$r_3 = (-1, 2, 2)$$

$$r_2 r_3 = 2 \cdot (-1) + (-4) \cdot 2 + (-3) \cdot 2 = -2 - 8 - 6 = -16$$

Answer: -16