Answer on question #52393, Math, Combinatorics — Number Theory

Question A student has to take 8 courses to graduate. If none of the courses are prerequisites for others, how many groups of 3 courses can the student select for the coming semester?
Select one: a. 11
b. 12
c. 24
d. 48
e. 56

Solution In this question you are actually asked to find

$$C_8^3 = \frac{6 \cdot 7 \cdot 8}{1 \cdot 2 \cdot 3} = 56$$

Answer is e. 56.