

Answer on Question #62005 – Math – Statistics and Probability

Question

A survey of 500 construction companies showed that 310 of them advertised in magazine A, 304 advertised in magazine B, and 220 advertised in both.

What is the probability that a construction company advertised in at least one of the two magazines?

Solution

$$P(A \cup B) = P(A) + P(B) - P(A \cap B) = \frac{310}{500} + \frac{304}{500} - \frac{220}{500} = \frac{310+304-220}{500} = \frac{394}{500} = 0.788.$$

Answer: 0.788.