Addition Rule 1: When two events, A and B, are mutually exclusive, the probability that A or B will occur is the sum of the probability of each event.

P(A or B) = P(A) + P(B)

Example: when a dice is rolled, what is the probability of rolling a 3 or a 4?

$P(3) = \frac{1}{6}$ $P(4) = \frac{1}{6}$ $P(3 \text{ or } 4) = \frac{1}{6} + \frac{1}{6} = \frac{2}{6} \text{ or } \frac{1}{3}$

Experiment 1: a dice is rolled, what is the probability of rolling a 2 or a 5?

P(2) = _____

P(5) = _____

P(2 or 5) = P(2) + P(5)

= _____ + _____ = _____ = _____

Experiment 2: A spinner has 4 equal sectors colored yellow, blue, green, and red. What is the probability of landing on red or blue after spinning this spinner?



P(red or blue) = P(red) + P(blue)

= _____ + _____ = _____ = _____

Experiment 3: Ahmed organizes all of his social media contacts into 3 groups, close friends, acquaintances, and restricted, as follows:



What is the probability if a selected contact is either a friend or acquaintance?

P(F or A) = P(F) + P(A)

= _____ + _____ = _____ = _____ = %

LIVEWORKSHEETS