

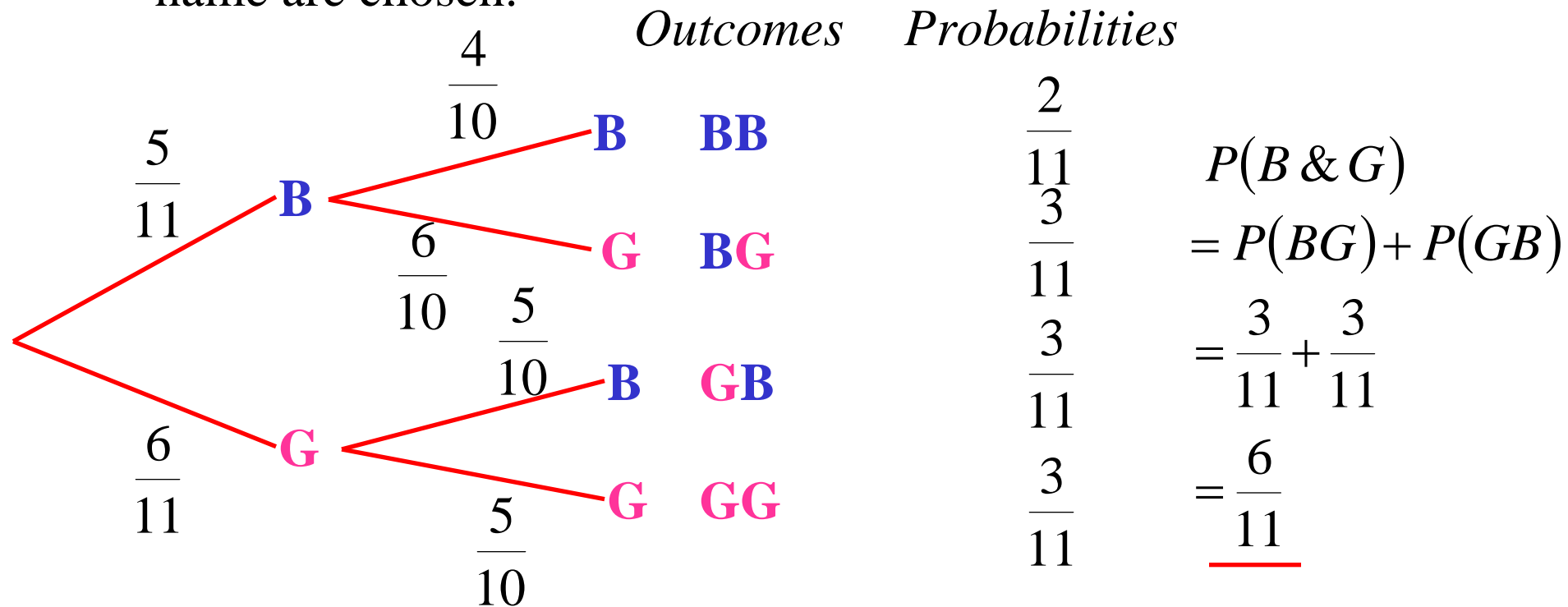
Tree Diagrams

AND = multiply the probabilities

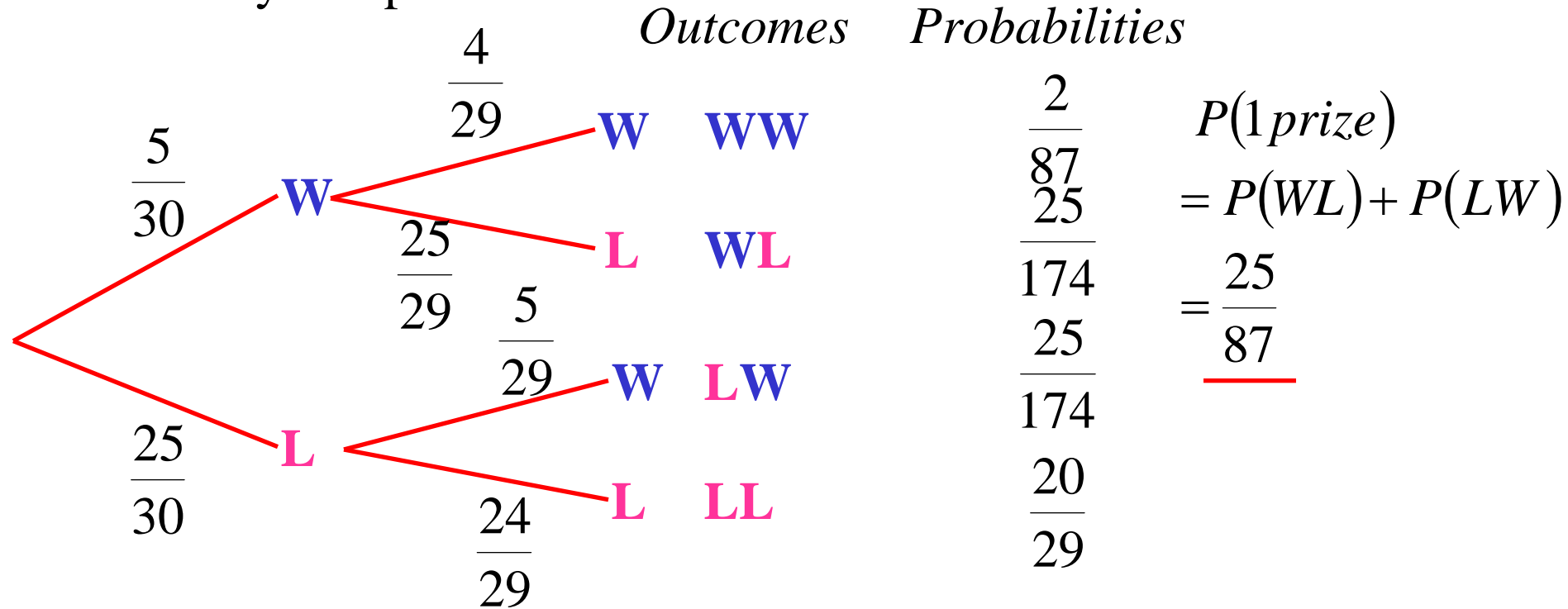
OR = add the probabilities

e.g. 5 boy's names and 6 girl's names are in a hat.

Find the probability that in two draws a boy's name and a girl's name are chosen.



- (ii) In a raffle 30 tickets are sold and there are 2 prizes. What is the probability that someone buying 5 tickets wins exactly one prize?



- (iii) What is the probability of winning at least one prize?

$$P(\geq 1 \text{ prize}) = 1 - P(0 \text{ prizes})$$

$$= \frac{9}{29}$$

Exercise 10D; odd