

11.1

# Determining Probabilities Using Tree Diagrams and Tables

MathLinks 8, pages 410–418

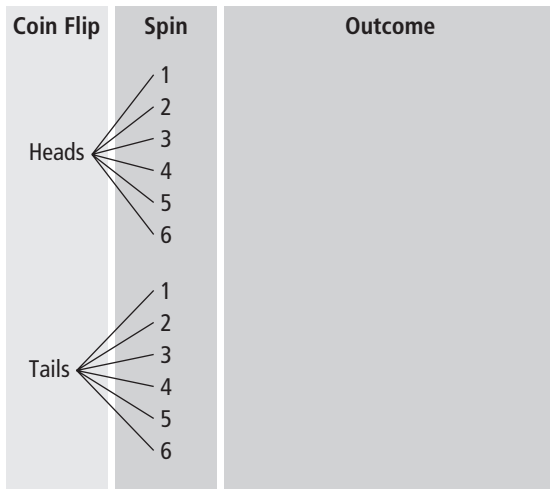
## Key Ideas Review

Match each statement in column A to a term in column B.

A	B
1. Determined from tree diagrams and tables. _____	a) probability
2. The probability of A then B occurring. _____	b) tree diagrams
3. The number of favourable outcomes divided by the total number of possible outcomes. _____	c) $P(A, B)$
4. The probability both A and B occurring. _____	d) probabilities
5. Used to show sample space for a probability experiment. _____	e) $P(A \text{ then } B)$

## Practise and Apply

6. The following tree diagram shows the sample space for flipping a coin and rolling a six-sided die. Fill in the outcome column.



a) What is  $P(H, 6)$ ?

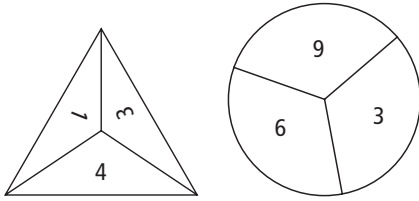
b) What is  $P(T, \text{odd number})$ ?

c) What is  $P(H, 7)$ ?

Name: \_\_\_\_\_

Date: \_\_\_\_\_

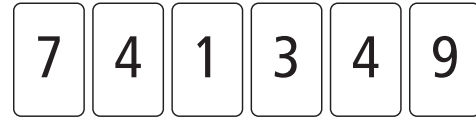
7. A four-sided die labelled 1, 2, 3, and 4 is rolled and a spinner labelled 3, 6, and 9 is spun.



- a) Create a table to show the sample space.

- b) What is  $P(\text{sum even number})$ ?

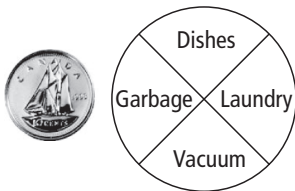
9. In this card game there are two identical sets of six cards. You pick up a card from each set. The idea of the game is to make a sum of 10.



- a) Create a table to show all the combinations.

- b) What is  $P(3, 3)$ ?

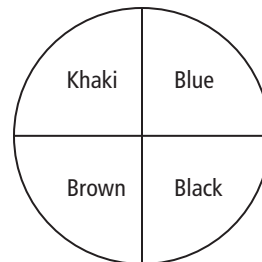
8. Each week Sam (H) and Lacy (T) choose chores by flipping a coin and spinning a spinner.



- a) Draw a tree diagram to show the sample space.

- b) What is the probability that Sam will have to do dishes this week?

10. Trey chooses his outfits by spinning this spinner twice. The first spin is for the colour of pants and the second spin is for the colour of shirt.



- a) Show the sample space.

- b) What is  $P(\text{same colour})$ ?