

Textbook Unit 7 Lesson 7 Answers

1. a) Possible Outcomes: Win, Lose, Spin Again
b) Possible Outcomes: Red, Black, Blue
c) Possible Outcomes: 1, 2, 3

2. a) 8 times
b) Heads $\frac{12}{20}$ Tails $\frac{8}{20}$
c) The probability of a head or tail is $\frac{1}{2}$ so in theory you should have 10 heads and 10 tails.
d) Dave should get in theory, 50 heads and 50 tails.

3. a) 24 spins
b) Blue $\frac{17}{24}$ Orange $\frac{7}{24}$
c) They are very close. In theory Avril should land on blue 18 times and land on orange 6 times.

4. a) Red $\frac{35}{50}$
b) It should occur about 70 times.
c) Red $\frac{58}{100}$
d) Nina didn't do anything wrong. Sometimes there are differences between experimental results and theoretical probabilities.

5. a) Possible Outcomes: 1, 2, 3, 4, 5, 6
b) i) $\frac{1}{6}$ ii) $\frac{3}{6}$ or $\frac{1}{2}$ iii) $\frac{2}{6}$ or $\frac{1}{3}$ iv) $\frac{2}{6}$ or $\frac{1}{3}$

6. a) It is a fair game. The sections are the same size and there are 5 of each.
b) $\frac{5}{10}$ or $\frac{1}{2}$
d) You would expect to get an odd number 50 times and an even number 50 times.