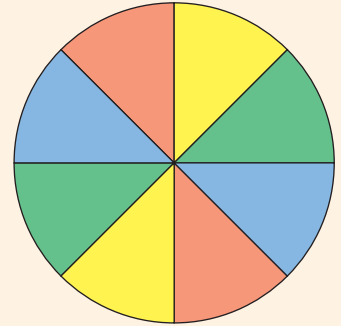


Mixed revision 4

See Exercise 11-01

- 1 List the sample space for each experiment.
 - a Rolling a die
 - b Spinning the spinner shown



See Exercise 12-01

- 2 There are 18 girls in a class of 30 students. Write each ratio in simplest form:
 - a girls to students
 - b girls to boys
 - c students to boys

See Exercise 12-04

- 3 Express each of these as a simplified rate:
 - a 200 km in 8 hours
 - b \$24 for 6 metres
 - c 1000 revolutions in 2 minutes
 - d 2100 cars in 7 days

See Exercise 12-10

- 4 How many hours and minutes between:
 - a 4:30 a.m. to 9:55 a.m.?
 - b 7:15 p.m. to 8:25 p.m.?
 - c 9:24 p.m. to 9:05 a.m.?
 - d 1505 to 2210?

See Exercise 12-09

- 5 Write in 24-hour time:
 - a 8:25 a.m.
 - b 4:45 p.m.

See Exercise 12-09

- 6 Write in 12-hour time:
 - a 2115
 - b 0430

See Exercise 12-02

- 7 Simplify each ratio.
 - a 2 : 6
 - b 96 : 36
 - c 24 : 72
 - d 2 m to 15 cm
 - e 10 minutes to 2 hours
 - f 12 : 30 : 42

See Exercise 11-02

- 8 A standard die is rolled. Find the probability of rolling:
 - a an even number
 - b a number greater than 2

See Exercise 11-04

- 9 At a vehicle checkpoint, the following types of vehicles were counted in a 2-hour period.

Cars 30	Trucks 7	Motorcycles 11	Buses 2
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 - a How many vehicles passed the checkpoint in this time period?
 - b Based on this data, what is the probability the next vehicle to pass the checkpoint will be a car?

See Exercise 12-03

- 10 The ratio of boys to girls at the public speaking competition is 4 : 3. If there are 15 girls, find the number of boys.

See Exercise 11-03

- 11 A pack of 20 cards contains 10 blue, 6 purple and 4 pink cards. One card is drawn from the pack at random. Find the probability that this card is:
 - a purple
 - b not purple

12 In 20 hours, a train travels 800 km.

See Exercise 12-06

- What is its average speed in km/h?
- How far would it travel in 11 hours at the same rate?

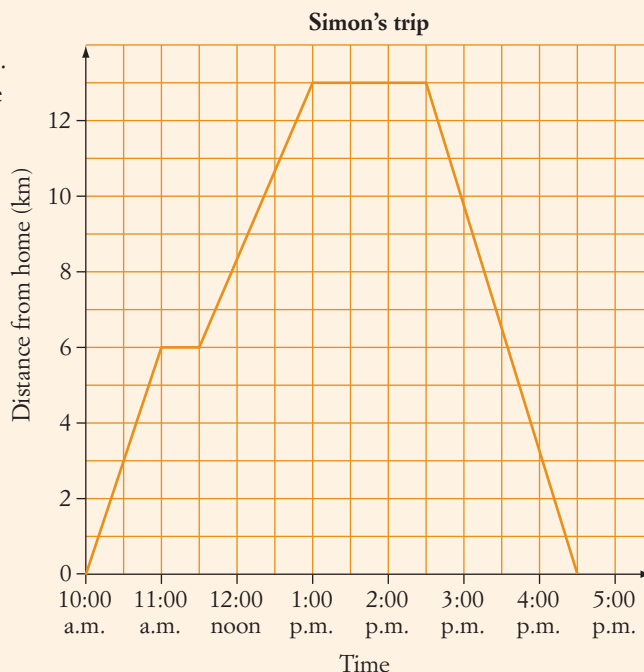
13 Water flows into a tank at the rate of 15 litres per hour. How long will it take to fill the tank if the tank holds 750 litres?

See Exercise 12-06

14 Simon goes on a cycling trip as shown in the graph on the right.

See Exercise 12-07

- How far was Simon from home at 11 a.m.?
- When, and for how long, did Simon stop for lunch?
- How far did Simon cycle in total?
- At what times was Simon 3 km from home?
- Was Simon's speed greater in the first hour or between 11:30 a.m. and 1 p.m.?



15 Choc-chip ice-cream is sold in three sizes:

See Exercise 12-05

- 1 litre for \$3.25
- 2 litres for \$6.30
- 1.5 litres for \$4.80.

Which size is the best buy?