#### Extra Exercises 6.1

#### Multiplication of Whole Numbers

1. Find:

(a) 
$$4 \times 7$$

(b) 
$$7 \times 7$$

(c) 
$$8 \times 6$$

(d) 
$$9 \times 5$$

(e) 
$$6 \times 9$$

(f) 
$$8 \times 8$$

(g) 
$$9 \times 8$$

(h) 
$$8 \times 7$$

(i) 
$$9 \times 9$$

2. Is each of these statements *true* or *false*?

(a) 
$$6 \times 5 = 5 \times 6$$

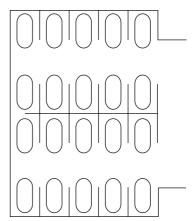
(b) 
$$2 \times 8 = 4 \times 4$$

(c) 
$$9 \times 8 = 18 \times 4$$

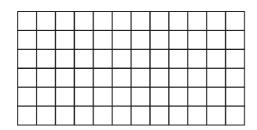
(d) 
$$7 \times 8 = 6 \times 9$$

3. Mark saves £3 each week.

- (a) How much has he saved after 6 weeks?
- (b) How many more weeks will it take him to save £30?
- 4. The diagram opposite shows cars parked in a car park. How many cars have been parked?



5. One wall of a room is tiled. There are 12 tiles along the horizontal and 6 tiles along the vertical, as shown below.



- (a) How many tiles are there in total?
- (b) Tiles come in boxes of 8.How many boxes of tiles will be needed to tile this wall?

### Extra Exercises 6.2

## Long Multiplication

1. Find, by any method other than using a calculator:

(a)  $4 \times 24$ 

(b)  $7 \times 35$ 

(c)  $6 \times 33$ 

(d)  $9 \times 37$ 

(e)  $11 \times 43$ 

(f)  $12 \times 25$ 

(g)  $42 \times 52$ 

(h)  $19 \times 56$ 

(i)  $58 \times 18$ 

(j)  $46 \times 27$ 

(j)  $112 \times 23$ 

(1)  $234 \times 41$ 

### Extra Exercises 6.3

### Multiplication with Decimals

1. Find:

(a) 
$$2 \times 0.6$$

(b) 
$$5 \times 0.3$$

(c) 
$$3 \times 0.4$$

(d) 
$$8 \times 1.4$$

(e) 
$$7 \times 2.5$$

(f) 
$$9 \times 3.6$$

(g) 
$$1.2 \times 2.2$$

(h) 
$$3.6 \times 1.4$$

(i) 
$$6.7 \times 3.1$$

(j) 
$$11 \times 8.3$$

(j) 
$$6.1 \times 23$$

(1) 
$$59 \times 4.2$$

2. Calculate:

(a) 
$$7 \times 10$$

(b) 
$$0.8 \times 10$$

(c) 
$$12.52 \times 10$$

(d) 
$$2 \times 6.9 \times 5$$

(e) 
$$100 \times 24.3$$

(f) 
$$2 \times 50 \times 4.72$$

(g) 
$$2.49 \times 1000$$

(h) 
$$4 \times 250 \times 3.6$$

(i) 
$$10 \times 27.21 \times 10$$

3. Given that  $46 \times 93 = 4278$ , find, without further calculation:

(a) 
$$4.6 \times 9.3$$

(b) 
$$46 \times 0.93$$

(c) 
$$0.46 \times 9.3$$

(d) 
$$0.46 \times 0.93$$

(e) 
$$4600 \times 0.93$$

(f) 
$$460 \times 930$$

### Extra Exercises 6.4

#### **Problems Involving Multiplication**

- 1. A textbook costs £4. How much will 28 textbooks cost in total?
- 2. A box of chocolate contains 12 chocolates. How many chocolates will there be in total in 5 of these boxes of chocolates?
- 3. A milk crate contains 24 bottles of milk. There are 15 full crates on a milk float when it leaves the depot at the start of its delivery round.
  - (a) How many bottles of milk are on the float when it leaves the depot?

When the float returns it has exactly 2 full crates of milk bottles.

- (b) How many bottles of milk have been delivered?
- 4. A cheeseburger costs £1.59. Find the cost of 10 of these cheeseburgers.
- 5. Ribbon is sold for 43p a metre. What is the cost of 10 metres of ribbon?
- 6. An adult's meal costs £5.99 and a child's meal costs £1.99. Find the cost of meals for 2 adults and 3 children.
- 7. The price of a carpet is £3.99 per square metre. What is the cost of 12 square metres of this carpet?
- 8. Apples are sold for £1.04 per kilogram. What is the cost of 2.5 kilograms of apples?
- 9. Rope is sold for £1.40 per metre. What is the cost of 2.7 metres of rope?

Answers

1. (a) 28

(b) 49

(c) 48

(d) 45

(e) 54

(f) 64

(g) 72

(h)

56

(i) 81

2. (a), (b), (c): true

(d): false

3. (a) £18

(b) 4 more weeks

4. 20 cars

5. (a) 72 tiles

(b) 9 boxes

### Answers

1. (a) 96

(b) 245

(c) 198

(d) 333

(e) 473

(f) 300

(g) 2184

(h) 1064

(i) 1044

(j) 1242

(k) 2576

(1) 9594

#### Answers

1. (a) 1.2

(b) 1.5

(c) 1.2

(d) 11.2

(e) 17.5

(f) 32.4

(g) 2.64

(h) 5.04

(i) 20.77

(j) 91.3

(k) 140.3

(1) 247.8

2. (a) 70

(b) 8

(c) 125.2

(d) 69

(e) 2430

(f) 472

(g) 2490

(h) 3600

(i) 2721

3. (a) 42.78

(b) 42.78

(c) 4.278

(d) 0.4278

(e) 4278

(f) 427 800

#### Answers

- 1. £112
- 2. 60 chocolates
- 3. (a) 360
- (b) 312
- 4. £15.90
- 5. £4.30
- 6. £17.95
- 7. £47.88
- 8. £2.60
- 9. £3.78