# **UNIT 8** Arithmetic: Division of Decimals

### **Extra Exercises 8.1**

#### Mental Division of Whole Numbers

1. Find:

(a) 
$$20 \div 4$$

(b) 
$$10 \div 5$$

(c) 
$$12 \div 4$$

(d) 
$$15 \div 3$$

(e) 
$$24 \div 4$$

(f) 
$$18 \div 6$$

(g) 
$$16 \div 8$$

(h) 
$$22 \div 2$$

(i) 
$$36 \div 6$$

(j) 
$$45 \div 5$$

(k) 
$$40 \div 4$$

(1) 
$$48 \div 8$$

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

(a) 
$$20 \div 2 + 4 = 4 + 20 \div 2$$

(b) 
$$4 + 16 \div 4 = 5$$

3. Calculate:

(a) 
$$5 + 3 \times 4$$

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

(c) 
$$6 - 8 + 10$$

(d) 
$$5 \times 3 + 5$$

(e) 
$$42 \div 6 + 3$$

(f) 
$$4 \times 3 + 5 \times 6$$

4. Find:

(a) 
$$400 \div 4$$

(b) 
$$60 \div 4$$

(c) 
$$144 \div 16$$

(d) 
$$128 \div 8$$

(e) 
$$208 \div 8$$

(f) 
$$240 \div 16$$

# **UNIT 8** Arithmetic: Division of Decimals

### Extra Exercises 8.2

#### Division Methods for Whole Numbers and Decimals

1. Calculate:

(a) 
$$120 \div 10$$

(b) 
$$75 \div 10$$

(c) 
$$4500 \div 10$$

(d) 
$$256 \div 100$$

(e) 
$$8600 \div 100$$

(f) 
$$720 \div 100$$

(g) 
$$27000 \div 1000$$

(h) 
$$4762 \div 1000$$

(i) 
$$6540 \div 1000$$

2. Calculate:

(a) 
$$93 \div 3$$

(b) 
$$6464 \div 8$$

(c) 
$$2940 \div 3$$

(d) 
$$595 \div 5$$

(e) 
$$162 \div 6$$

(f) 
$$868 \div 7$$

(g) 
$$3012 \div 12$$

(h) 
$$2080 \div 32$$

(i) 
$$522 \div 18$$

3. Carry out the following divisions, giving your answers as decimals:

(a) 
$$22 \div 4$$

(b) 
$$79 \div 2$$

(c) 
$$126 \div 4$$

(d) 
$$60 \div 8$$

(e) 
$$2.32 \div 2$$

(f) 
$$4.32 \div 3$$

(g) 
$$90.15 \div 5$$

(h) 
$$8.75 \div 5$$

(i) 
$$1554 \div 6$$

(j) 
$$364.5 \div 15$$

(k) 
$$736.8 \div 12$$

(1) 
$$49.5 \div 2$$

# **UNIT 8** Arithmetic: Division of Decimals

#### Extra Exercises 8.3

#### **Division Problems**

- 1. A pencil costs 9p. How many pencils can be bought with 72p?
- 2. A block of flats has 5 floors, each of which has 25 apartments. How many apartments are there in total?
- 3. Four boys share £18 equally between them. How much does each boy get?
- 4. A train with seven identical carriages can seat 504 passengers. How many people can each carriage seat?
- 5. Alan buys 12 tickets for a concert. He pays £66 in total. How much does each ticket cost?
- 6. A rope of length 46.4 m is cut into four equal lengths. How long is each piece?
- 7. Rachel has 49 sweets. She shares them out equally with her 6 friends. How many does each of them get?
- 8. £425.52 is shared equally between three people. How much does each person get?
- 9. Chocolate bars cost 37p each. How many can you buy with £2?
- 10. Textbooks cost £6.50 each. How many can a school buy with £150?
- 11. 356 seats are needed for transportion for a school trip. If each coach can take 48 people, how many coaches are needed?

# Extra Exercises 8.1

## Answers

1. (a) 5

(b) 2

(c) 3

(d) 5

(e) 6

(f) 3

(g) 2

(h) 11

(i) 6

(j) 9

(k) 10

(l) 6

2. (a) true

(b) false

3. (a) 17

(b) 30

(c) 8

(d) 20

(e) 10

(f) 42

9

4. (a) 100

(b) 15

(c)

(d) 16

(e) 26

(f) 15

# Extra Exercises 8.2

## Answers

1. (a) 12

(b) 7.5

(c) 450

(d) 2.56

(e) 86

(f) 7.2

(g) 27

(h) 4.762

(i) 6.54

2. (a) 31

(b) 808

(c0 980

(d) 119

(e) 27

(f) 124

(g) 251

(h) 65

(i) 29

3. (a) 5.5

(b0 39.5

(c) 31.5

(d) 7.5

(e) 1.16

(f) 1.44

(g) 18.03

(h) 1.75

(i) 259

(j) 24.3

(k) 61.4

(1) 24.75

# Extra Exercises 8.3

## Answers

- 1. 8 pencils
- 2. 125 apartments
- 3. £4.50
- 4. 72 people
- 5. £5.50
- 6. 11.6 m
- 7. 7 sweets
- 8. £141.84
- 9. 5 chocolate bars
- 10. 23 textbooks
- 11. 8 coaches