

Work out and explain the cheapest way that Tom, Marie and their friends can buy the food shown in each of the questions below. They need to combine their food orders.

- 1 Tom: 2 mega burgers, 1 large fries, 1 large drink  
Marie: 1 chicken burger, 1 large fries, 1 large drink
- 2 Tom: 1 cheeseburger, 1 large fries, 1 medium drink  
Marie: 1 mega burger, 1 large fries, 1 large drink  
Tamsin: 1 chickenburger, 1 medium fries, 1 medium drink  
Tariq: 1 cheeseburger, 1 large fries, 1 large drink
- 3 Tom: 2 mega burgers, 1 large fries, 1 large drink  
Marie: 1 chickenburger, 1 medium fries,  
6 chicken nuggets, 1 medium drink  
Harry: 1 cheeseburger, 1 medium fries, 1 large drink  
Ellis: 6 chicken nuggets, 1 large fries, 1 medium drink
- 4 Tom: Chicken nuggets (12 pieces), 1 large fries, 1 medium drink  
Marie: 1 mega burger, 1 large fries, 1 large drink  
Tamsin: 2 cheeseburgers, 1 medium fries, 1 medium drink  
Harry: 2 mega burgers, 1 large fries, 1 large drink  
Tariq: 1 cheeseburger, chicken nuggets (12 pieces), 1 medium fries, 1 medium drink  
Ellis: chicken nuggets (12 pieces), 1 medium fries, 1 large drink  
Jermaine: 1 chickenburger, 1 large fries, 1 large drink
- 5 Choose your own food and ask at least three other people to choose food. Work out the cheapest way of buying the food. Explain any meal deals used.



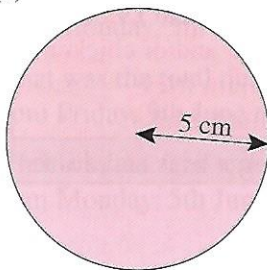
Now get other people in the class to work out the cheapest way of buying the food. Do you agree with their answers?

## UNIT 2 MIXED REVIEW

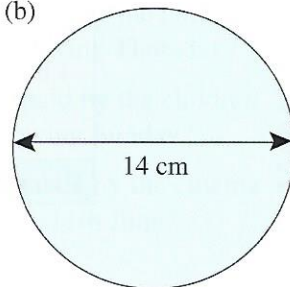
### Part one

- 1 How many apples at 16p each would be a fair exchange for 48 oranges costing 11p each?
- 2 Find the area of each shape. Give your answers correct to 1 decimal place.

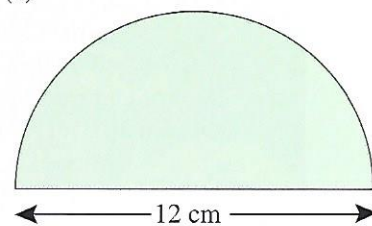
(a)



(b)



(c)



3 It costs 10p per minute to operate a machine. How much will it cost to operate the machine from 12:50 to 14:15?

4 Use a calculator to work out, correct to 1 decimal place

(a)  $19.6 - 6.2 \times 2.13$

(b)  $\frac{18.7}{5.6 - 2.91}$

(c)  $\left(\frac{8.2 + 1.173}{7.59}\right)^2$



5 When a taxi starts its journey, the mileometer reads 42714 miles. After two hours the mileometer reads 42858 miles. What is the average speed of the taxi?

6 Solve the equations.

(a)  $6x - 5 = 37$

(b)  $5x - 3 = 2x + 15$

(c)  $4(x - 5) = 16$

7 Copy and complete this multiplication square.

|   |    |    |    |    |
|---|----|----|----|----|
| × | 5  | 3  |    |    |
|   |    | 12 |    | 36 |
|   |    |    | 14 |    |
| 8 | 40 |    |    |    |
|   |    |    | 42 | 54 |

8 A woman hires a car from a car hire firm which charges £26 per day plus 12p per km travelled.

(a) How much does it cost to hire a car for four days and drive 200 km?

(b) How much does it cost to hire a car for six days and drive 650 km?

(c) The woman hired a car for two days and had to pay £112. How far did she drive?

£26 per day  
12p per km

9 Draw an angle of about  $60^\circ$ . Use a pencil, ruler and compasses only to construct the bisector of the angle.

- 10 Find the missing digits

(a)  $\square 7 \times 1 \square = 611$

(b) 
$$\begin{array}{r} 366 \\ 8 \overline{) \square 9 \square 8} \end{array}$$

(c)  $\square 6 \times 1 \square = 442$

(d) 
$$\begin{array}{r} 6 \square 1 \\ - \square 7 \square \\ \hline 263 \end{array}$$

(e) 
$$\begin{array}{r} \square \square 5 \\ \times 9 \\ \hline 256 \square \end{array}$$

(f) 
$$\begin{array}{r} 483 \\ 7 \overline{) \square 3 \square 1} \end{array}$$

- 11 The perimeter of this picture is 60 cm.
- 
- Find
- $x$
- then write down the area of the picture.



$2x + 5$

$x + 1$

- 12 Estimate the answer (do not use a calculator!)

(a)  $49.2 \times 2.07$

(b)  $0.971 \times 307.4$

(c)  $6154 \times 19.7$

(d)  $407 \div 19.2$

- 13 Draw a line with a point P on the line.
- 
- Construct the perpendicular from the point P.



- 14 Fifteen young people form a circle as shown.
- 
- The circumference of the circle is 27m.
- 
- Is the radius of the circle more or less than 4.2m?
- Explain your answer fully.*



- 15 Which is larger and by how much?

$2.4^5$

or

$2.1^6$

**Part two**

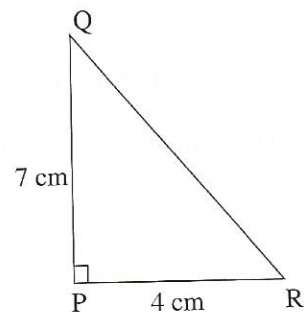
- 1 Solve the equations

(a)  $4x - 7 = 9 + 2x$

(b)  $4(2x - 1) = 3(x + 2)$

- 2 Construct the triangle shown, using ruler and compasses only.

Measure the side QR.



3 **Dinky's high price**

A Dinky Toy model of a Bentalls Kingston-on-Thames delivery van which cost 6d ( $2\frac{1}{2}$  p) in 1936, fetched a record £12,650 at a Christie's auction.

How many of the original models at  $2\frac{1}{2}$  p could you buy with £12 650?

4 Tickets for a school play are £5.90 each. *Estimate* the money taken if 112 tickets are sold.

5 A two pound coin has radius 1.4 cm and thickness 3 mm.

Calculate the height of a pile of two pound coins of total value £1000.



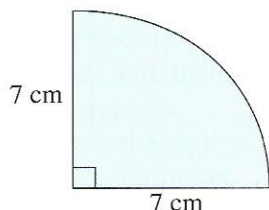
6 Use a calculator to work out, correct to 1 decimal place

(a)  $\frac{8.3 + 1.9}{14.4 - 8.16}$

(b)  $4.64^2 - 8.93$

(c)  $\sqrt{\frac{86.9}{16.18 - 9.4}}$

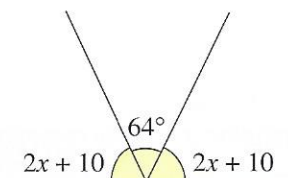
7



This shape is a quarter circle.

Calculate the perimeter of this shape, correct to 1 decimal place.

8



Find the value of  $x$ .

9 It takes Ellie 2 hours 25 minutes to pack her suitcase on average. She has to pack her suitcase before going on holiday and before coming home after her holiday.

She takes 3 holidays each year. What is the total time she spends packing her suitcase during the years 2000 up to and including the year 2010?

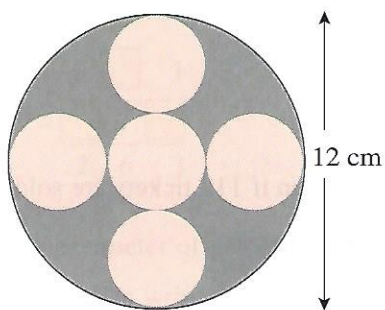


10 Solve the equations

(a)  $15 = 3(2x + 1)$

(b)  $4x + 12 = 47 - x$

11



Find the grey area. Give your answer in  $\text{cm}^2$ , correct to one decimal place.

12 42 people in a factory earn the same amount of money each week. If their total wage bill is £13104, *estimate* one person's wage.

13 Draw a line and a point A as shown. Construct the line which passes through A and is perpendicular to the line.

A

14 A wall measuring 3 m by 2 m is to be covered with square tiles of side 10 cm.

(a) How many tiles are needed?

(b) If the tiles cost £3.40 for ten, how much will it cost?

15 Work out  $x$  and then find the area of this picture.

