

# N3

## Number exam review

- 1** Toni buys a car for £2500 and sells it for £2775.  
Calculate her percentage profit.

..... %

(Total 3 marks)

- 2 a** Work out  $\frac{2}{15} \times 6$

Give your answer as a fraction in its simplest form.

.....

(2)

- b** Work out  $2\frac{2}{3} \div \frac{5}{6}$

Give your answer as a mixed number in its simplest form.

.....

(2)

(Total 4 marks)

**3**

### Andrea's Café

Delicious Cakes  
Only \$4.00 each

Andrea buys 100 cakes to sell in her café.  
She pays \$1.80 for each cake.

On Monday she sells 60 cakes,  
She sells these cakes for \$4.00 each

On Tuesday she reduces the price of each cake by  $\frac{1}{5}$

She sells 35 cakes at this reduced price.

Andrea then gives away the 5 unsold cakes.

Calculate the total profit that Andrea makes on the cakes.

\$ .....

(Total 6 marks)

**4** Pat drops a ball onto a wooden floor.  
The ball bounces to a height which is 26% less than the height from which it is dropped.

**a** Pat drops the ball from a height of 85 cm.  
Calculate the height to which it first bounces.

..... cm

(3)

**b** Pat drops the ball from a different height.  
It first bounces to a height of 48.1 cm.  
Calculate the height from which he dropped it.

..... cm

(3)

(Total 6 marks)

**5** Convert the recurring decimal  $0.\dot{2}\dot{3}$  to a fraction.

.....

(Total 2 marks)

**6** Michael says "When the fraction  $\frac{n}{45}$  is converted to a decimal, it never gives a terminating decimal."

**a i** Find a value of  $n$  which shows that Michael is wrong,

$n =$  .....

**ii** Write down the name of the type of number  $n$  must be,  
when  $\frac{n}{45}$  gives a terminating decimal.

.....

(2)

**b**  $\frac{62}{45} < \sqrt{2} < \frac{64}{45}$

Use these bounds to write the value of  $\sqrt{2}$  to an appropriate degree of accuracy.  
You must show your working and explain your answer.

.....

(2)

(Total 4 marks)

**7** Convert  $0.5\dot{1}$  to a fraction.

.....

(Total 2 marks)

**8** Work out  $5\frac{2}{3} - 2\frac{3}{4}$

.....

(Total 3 marks)

**9** Express the recurring decimal  $2.0\dot{6}$  as a fraction.  
Write your answer in its simplest form.

.....

(Total 3 marks)