

# Functional Skills

## Level 2

### **Topic:**

# Percentages

- 1 A photo shop records how many customers choose enlarged photographs. On one day 9 customers out of 15 ordered enlarged photographs.

What percentage of the customers ordered enlarged photographs?

- A 6.0%
- B 37.5%
- C 40%
- D 60%

- 2 The table shows the number of tins of soup of one type sold by a supermarket in a given week.

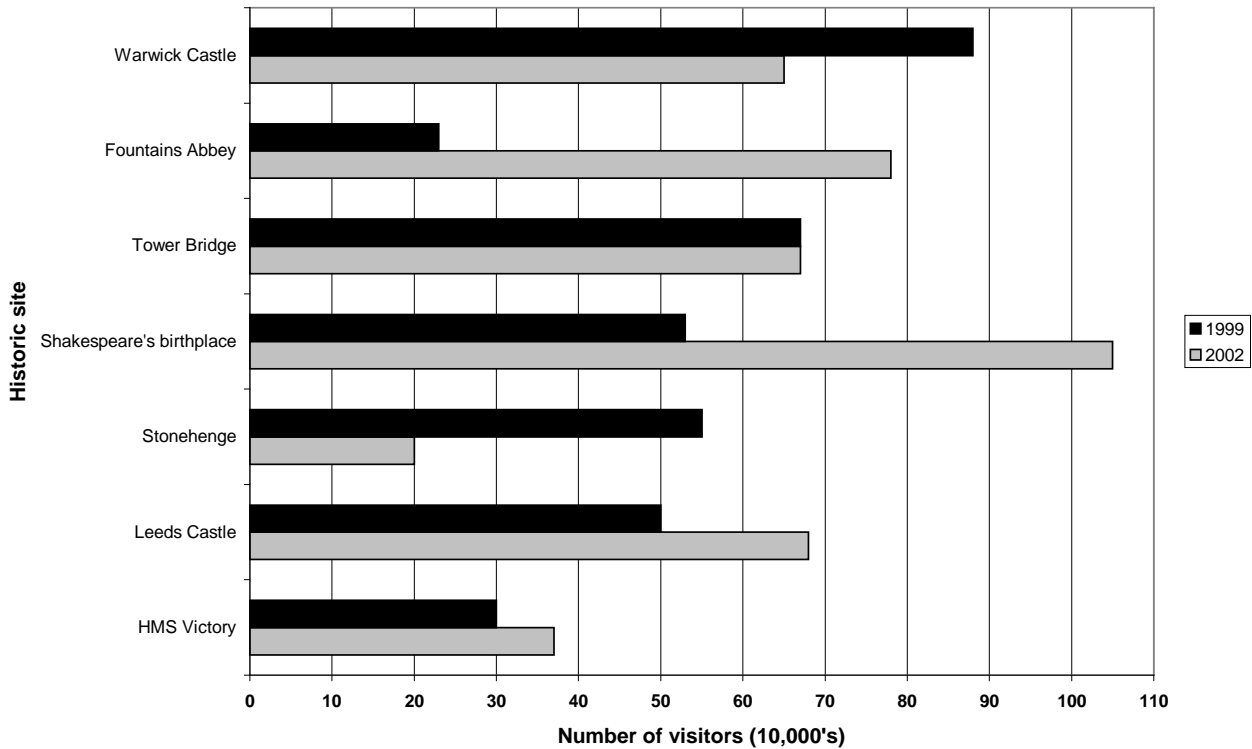
Day	Mon	Tues	Wed	Thurs	Fri	Sat	Total
Number of tins sold	105	118	97	110	101	90	621

The target sales are 90 tins per day.

By what percentage is the total number of tins sold greater than the sales target for the week?

- A 1.5%
- B 15%
- C 81%
- D 87%

3 The bar chart shows the number of visitors to seven historic sites in 1999 and 2002.



Which historic site had the greatest percentage increase in visitors between 1999 and 2002?

- A Shakespeare's birthplace
- B Tower Bridge
- C Stonehenge
- D Fountains Abbey

4 The number of visitors to Warwick Castle on 1st August 2001 was 974. On 1st August 2002 there were 1 220 visitors to the castle. Which calculation gives the percentage increase in visitor numbers?

- A  $\frac{1220 - 974}{974} \times 100$
- B  $\frac{1220}{1220 + 974} \times 100$
- C  $\frac{974}{1220} \times 100$
- D  $\frac{974}{1220 - 974} \times 100$

5 In 2002 the number of brochures sold to visitors at Warwick Castle was 9 480.

For 2003 it is expected that sales of brochures will increase by 30%.

The **closest** estimate to the likely number of brochures that will be sold in 2003 is

- A 2 840
- B 6 640
- C 12 320
- D 16 120

6 Wallpaper costs £11.40 per roll.

In a sale there is a discount of 20%

What is the cost of 1 roll of wallpaper after the discount?

- A £2.28
- B £9.12
- C £10.26
- D £11.20

7 A customer at an auction borrows £4 000 from a finance company to pay for furniture. The table below shows the interest rates charged by the finance company for borrowing money.

Amount borrowed	Up to £500	£501 to £2 000	£2 001 to £5 000	Above £5 000
Interest rate paid per year	9.0%	8.0%	7.5%	7.0%

How much interest does the customer pay on a loan of £4 000 after one year?

- A £280
- B £285
- C £300
- D £320

- 8** A man is a member of a trade association.  
This year he makes a single payment of £175 for membership.  
Last year he paid £16 per month for 12 months.

Which calculation gives the percentage he saves this year compared to last year?

**A**  $\frac{12 \times 16 - 175}{175} \times 100$

**B**  $\frac{12 \times 16 - 175}{12 \times 16} \times 100$

**C**  $\frac{175}{12 \times 16 - 175} \times 100$

**D**  $\frac{12 \times 16}{12 \times 16 - 175} \times 100$

- 9** The average weight for girl babies aged 36 months is 13.9 kg.  
One girl aged 36 months weights 2.1 kilograms less than this average.  
Which is closest to 2.1 kilograms as a percentage of 13.9 kilograms?

**A** 5%

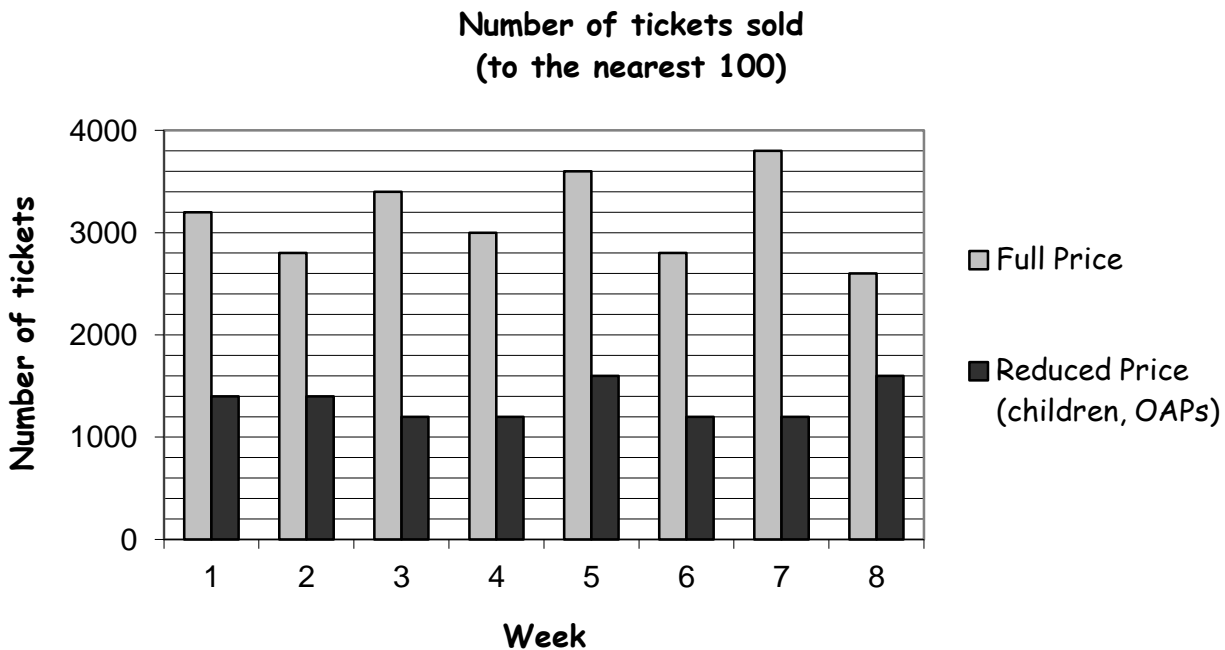
**B** 10%

**C** 15%

**D** 20%

Questions 10 to 12 are about a cinema complex.

The chart shows the number of ticket sales at the cinema complex during a period of 8 weeks.



- 10 What is the smallest **total** number of tickets sold during any one week?
- A 4 000  
B 4 200  
C 4 800  
D 5 000
- 11 Approximately what percentage of the **total** ticket sales during Week 3 are reduced price tickets?
- A 12%  
B 25%  
C 33%  
D 50%
- 12 The cinema conducts a survey of how people bought their tickets. Of the people surveyed,  $\frac{1}{5}$  said that they purchased a ticket using the internet. The manager wants to increase this to 33% by the end of the year. To achieve this, what **extra** percentage of cinema goers need to purchase their tickets using the internet?
- A 13%  
B 18%  
C 20%  
D 28%