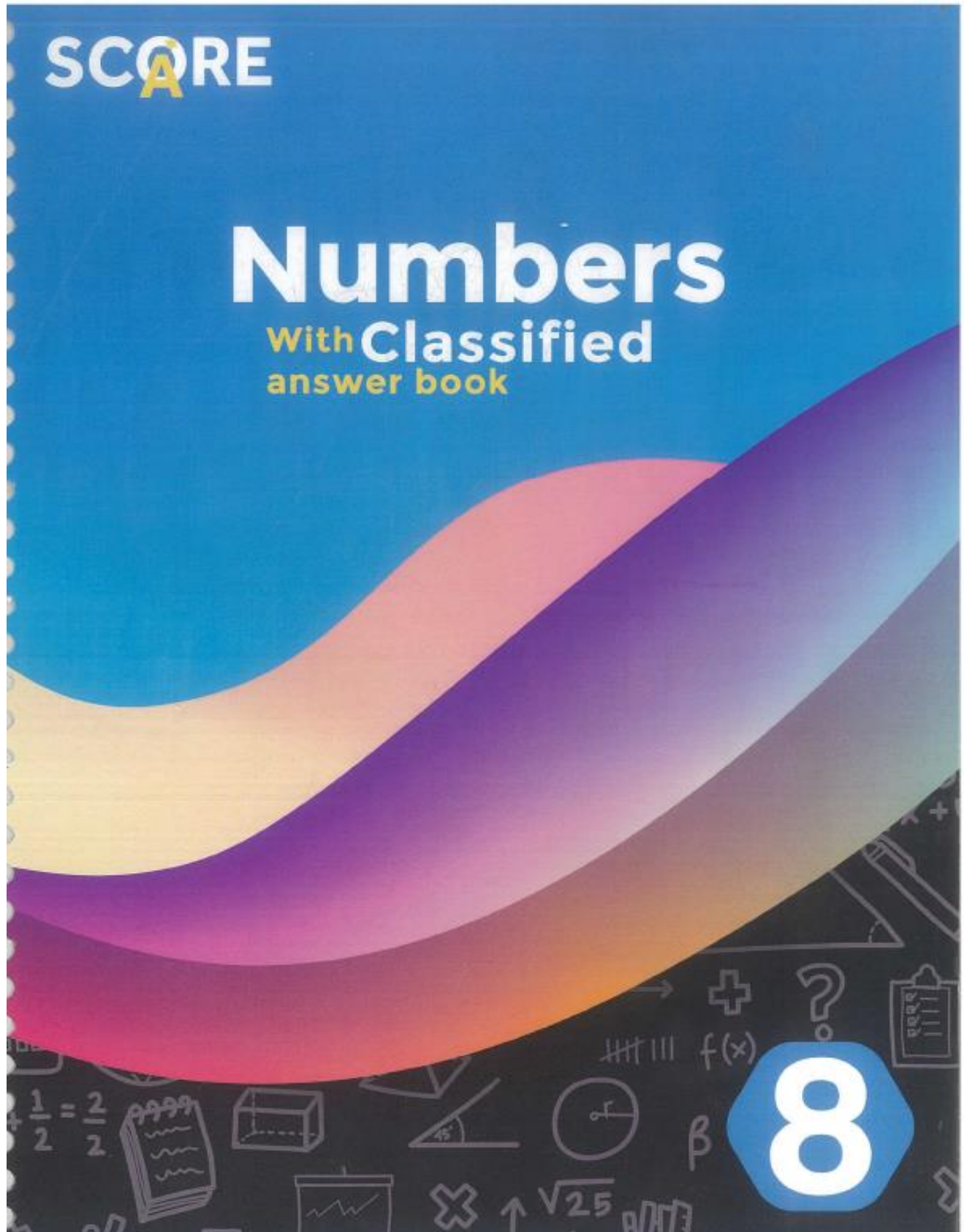


Classified - Percentage increase and decrease

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## 17- Percentage increase and decrease

1. Increase £2400 by 9%

2. Increase 40 miles by 43%

3. Decrease 18000 by 6%

4. Decrease 712kg by 24%

5. A plant is 6.2 cm tall.

The height of the plant increases by 11% each week.

Find how tall the plant will be after two weeks.

6. Oliver's salary is £18,000 and he is due to get an increase of 4%.  
How much will this increase be?

7. A new TV is priced at £320.  
In a sale it is reduced by  
45%  
Calculate the sale price

8. Joanne sees this special offer in a shop.

| Special Offer                            |      |
|--|------|
| iPod                                     | £189 |
| Headphones                               | £25  |
| Buy both items and receive a 4% discount |      |

Joanne buys both items.

How much does she pay?

9. Hassan buys an apartment for \$78 000  
After one year the value decreases by 5%.  
Work out the new value of Hassan's apartment.

10. The price of a coat is £65  
In a sale the price is reduced by  
15% What is the sale price of the  
coat?

11. Bytes is a shop that sells computers and digital cameras.  
In 2003, Bytes sold 620 computers.  
In 2004, Bytes sold 708 computers.  
Work out the percentage increase in the number of computers sold.  
Give your answer to an appropriate degree of accuracy.

12. In April 2004, the population of the European Community was 376 million.  
In April 2005, the population of the European Community was 451 million.  
Work out the percentage increase in population.  
Give your answer correct to 1 decimal place.

13. In 2004 a newspaper published this incorrect report:

Houses cost £60 000 one year ago. They now cost £80 000  
This is a 25% increase.

Write the missing numbers below to make each statement correct.

(a) Houses cost £60 000 one year ago.  
They now cost £\_\_\_\_\_.  
This is a 25% increase.

(b) Houses cost £60 000 one year ago.  
They now cost £80 000  
This is a \_\_\_\_\_% increase.

(c) Houses cost £\_\_\_\_\_ one year ago.  
They now cost £80 000  
This is a 25% increase.

14. In 2005, about 60.2 million people lived in the UK.

Look at the information about these people.

- 50.4 million lived in England. 5.1
- million lived in Scotland.
- 3 million lived in Wales.
- The rest lived in Northern Ireland.

(a) In 2005, about how many people lived in Northern Ireland?

million

(b) In 2005, about what percentage of people in the UK lived in Wales?

Tick (✓) the correct value.

1%

5%

20%

63%

15. Match each statement to the correct calculation.

Increase 20 by 15%

$20 \times 0.15$

Decrease 20 by 15%

$20 \times 1.15$

Find 15% of 20

$20 \times 0.85$

16. The cost of a compact disc holder is 25p.

John has £15 to spend.

- (a) What is the greatest number of compact disc holders that John can buy for £15?

A compact disc player costs £50 plus 10% VAT.

- (b) Calculate the total cost of the compact disc player.



17. a) William's salary is £24 000 His salary increases by 4%.

Work out William's new salary.

b. The table shows the number of mobile phones sold in a shop in April and in May.

| April | May |
|-------|-----|
| 85    | 91  |

Work out the percentage increase in the number of mobile phones sold from April to May.

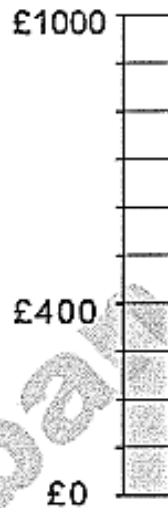
Give your answer correct to 3 significant figures.

18. A class is collecting money for charity.

They want a total of £1000

By the end of April, they have collected £400

(a) What percentage of their total have they collected by the end of April?



(b) By the end of May, they have collected 85% of their total.

Shade more of the diagram to show this.

Eng. Magda El-Labbani