

# Spotting the best deal

13th May 2020

National Numeracy Day

Take a look at the prices of three packs of the same coffee.

**Which is the best value?**

- a) **750g for £4.50**
- b) **500g for £3.00**
- c) **1000g for £6.00**



Brought to you by



Founding supporter



[numeracyday.com](https://www.numeracyday.com)  
#NationalNumeracyDay

# How to handle percentages

13th May 2020

National Numeracy Day

A monthly train ticket costs £250.00. The price increases by 10%. **What's the new price?**

---

## Step 1:

Divide £250 by 100 to find 1%  
 $£250 \div 100 = £2.50$

---

## Step 2:

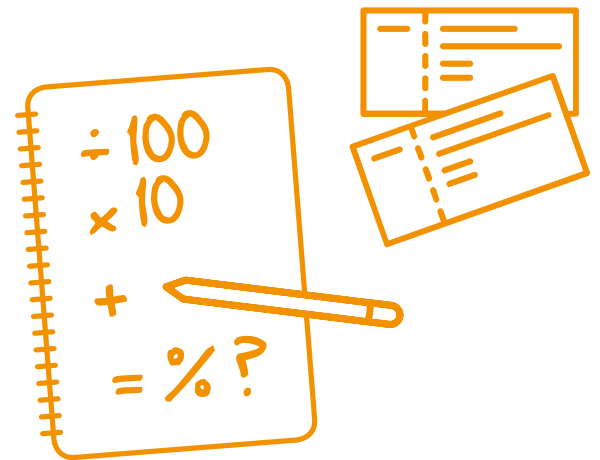
Multiply £2.50 by 10 to find 10%  
 $£2.50 \times 10 = £25$

---

## Step 3:

Add this increase to the original to get the new price  
 $£250 + £25 = £275$

There are many ways to work out percentages. This is just one example that you can use every day.



Brought to you by



Founding supporter



[numeracyday.com](https://www.numeracyday.com)  
#NationalNumeracyDay

Why not set up a quiz using the following questions:

## Geography numbers

### 1. Which London Underground line has the most stations?

- a) The Central Line
- b) The Northern Line
- c) The District Line

### 2. How many steps are there in New York City's Empire State Building?

- a) 1576 b) 2021 c) 961

### 3. How many formally recognised countries start with the letter A (in English)?

- a) 10 b) 11 c) 8

### 4. How many main islands are there in the Canary Islands?

- a) 9 b) 4 c) 7

### 5. How long is the Great Wall of China in kilometres?

- a) 2040km b) 10,922km c) 21,196km

## ANSWERS

1. c: The District Line has 60 stations, the most of any London Underground line.

2. a: There are 1576 steps from the bottom to the top of the Empire State Building.

3. b: There are 11 countries in the world beginning with the letter A. They are: Afghanistan, Albania, Algeria, Andorra, Angola, Antigua and Barbuda, Argentina, Armenia, Australia, Austria and Azerbaijan.

4. c: There are 7 main islands in the Canaries: Gran Canaria, Fuerteventura, Lanzarote, Tenerife, La Gomera, La Palma and El Hierro.

5. c: The Great Wall of China is 21,196km long.

## Quiz sheet 1

Brought to you by



Founding supporter



# Quiz

13th May 2020

National  
Numeracy  
Day

## Music numbers

1. According to the song “Seasons of Love” from the musical Rent, how many minutes are there in a year?

a) 5,250,600 b) 525,600 c) 5,260

2. On which Adele album would you find the song “Hello”?

a) 19 b) 21 c) 25

3. What do you get if you add together the number of members of the Spice Girls, Little Mix and Girls Aloud?

a) 15 b) 13 c) 14

4. Who sung the song “Eight Days a Week”?

a) Abba b) The Beatles  
c) The Rolling Stones

5. Divide, Multiply and Plus are all albums by which British artist?

a) Ed Sheeran b) Sam Smith c) Olly Murs

## ANSWERS

1. b: 525,600. This is factually correct – there are 525,600 minutes in a non-leap year.

2. c: 25.

3. c: 14. The Spice Girls have 5, Little Mix have 4 and Girls Aloud had 5.

4. b: the Beatles.

5. a: Ed Sheeran.

## Quiz sheet 2

Brought to you by



Founding supporter



[numeracyday.com](https://www.numeracyday.com)  
#NationalNumeracyDay

## General knowledge numbers

**1. How many points would you get in Scrabble if you added together the first letter of the words National Numeracy and Day?**

a) 3 b) 4 c) 7

**2. How many sides does a hendecagon have?**

a) 11 b) 13 c) 17

**3. In what year was the book 1984 by George Orwell published?**

a) 1939 b) 1949 c) 1983

**4. How many white pawns are there on a standard chess board at the start of a game?**

a) 8 b) 12 c) 16

**5. How many people would be at a party if each of the main characters from the TV show F.R.I.E.N.D.S brought 7 friends with them?**

a) 30 b) 42 c) 48

## ANSWERS

1. b: 4. The letters N are each worth 1 point and D is worth 2 points.

2. a: A hendecagon is an 11-sided polygon.

3. b: 1949.

4. a: 8. There are 8 white pawns and 8 black pawns at the start of a standard game of chess.

5. c: 48. There would be 6 main characters, plus 42 friends.

## Quiz sheet 3

Brought to you by



Founding supporter



## History numbers

**1. Around which sea are the majority of the 7 Wonders of the Ancient World located?**

- a) the Mediterranean Sea  
b) the Aegean Sea c) the Dead Sea

**2. Which King Richard was also called Richard the Lionheart?**

- a) Richard I b) Richard III c) Richard IV

**3. What do the Roman numerals XCIX represent?**

- a) 71 b) 99 c) 119

**4. How many years did the Hundred Years' War actually last?**

- a) 95 b) 116 c) 200

**5. How many years were there between the start of the First World War and the start of the Second World War?**

- a) 20 b) 22 c) 25

## ANSWERS

1. a: the Mediterranean Sea.  
2. a: Richard I.  
3. b: 99.  
4. b: 116 years.  
5. c: 25

## Sport numbers

**1. If your football team wins 5 games in the Premier League, how many points does it get?**

a) 20 b) 15 c) 30

**2. How many points does a Formula 1 team score in a race if the drivers finish in 1st and 2nd place?**

a) 43 b) 25 c) 18

**3. The 1970 FA Cup Final was tied, with Chelsea beating Leeds United 2 - 1 in the replay. What was the UK television audience for the replay?**

a) 28,000,000 b) 16,500,000  
c) 8,500,000

**4. How many basic ballet positions are there?**

a) 3 b) 5 c) 8

**5. According to a recent report, the average annual pay in the Women's Super League in England is £26,752 - while their male colleagues in the Premier League earn an average of around £50,800 per week. Which of these is the best estimate of the ratio of their salaries?**

a) 20:1 b) 50:1 c) 100:1

## ANSWERS

1. b: 15 points - 3 points per game.

2. a: 43 points.

3. a: Incredibly, about half the UK population tuned in to watch what turned out to be a bruising physical encounter. A modern referee has suggested that the same level of physicality today would result in six red cards and 20 yellows!

4. b: There are 5 basic ballet positions.

5. c: 100:1. According to the same report, Premier League footballers are by no means the highest paid team players on the planet. That distinction goes to the basketball players of the American NBA, who earn an average of about £5.5 million per year - about 96 times what their female equivalents in the WNBA are paid.

## Quiz sheet 5

Brought to you by



Founding supporter



**Team name:** \_\_\_\_\_

Answer sheet 1 (circle your chosen answer)

## Geography numbers

**1. Which London Underground line has the most stations?**

- a) The Central Line
- b) The Northern Line
- c) The District Line

**2. How many steps are there in New York City's Empire State Building?**

- a) 1576
- b) 2021
- c) 961

**3. How many formally recognised countries start with the letter A (in English)?**

- a) 10
- b) 11
- c) 8

**4. How many main islands are there in the Canary Islands?**

- a) 9
- b) 4
- c) 7

**5. How long is the Great Wall of China in kilometres?**

- a) 2040km
- b) 10,922km
- c) 21,196km

## Music numbers

**1. According to the song "Seasons of Love" from the musical Rent, how many minutes are there in a year?**

- a) 5,250,600
- b) 525,600
- c) 5,260

**2. On which Adele album would you find the song "Hello"?**

- a) 19
- b) 21
- c) 25

**3. What do you get if you add together the number of members of the Spice Girls, Little Mix and Girls Aloud?**

- a) 15
- b) 13
- c) 14

**4. Who sang the song "Eight Days a Week"?**

- a) Abba
- b) The Beatles
- c) The Rolling Stones

**5. Divide, Multiply and Plus are all albums by which British artist?**

- a) Ed Sheeran
- b) Sam Smith
- c) Olly Murs



**Team name:** \_\_\_\_\_

Answer sheet 2 (circle your chosen answer)

## General knowledge numbers

**1. How many points would you get in Scrabble if you added together the first letter of the words National Numeracy and Day?**

- a) 3    b) 4    c) 7

**2. How many sides does a hendecagon have?**

- a) 11    b) 13    c) 17

**3. In what year was the book 1984 by George Orwell published?**

- a) 1939    b) 1949    c) 1983

**4. How many white pawns are there on a standard chess board at the start of a game?**

- a) 8    b) 12    c) 16

**5. How many people would be at a party if each of the main characters from the TV show F.R.I.E.N.D.S brought 7 friends with them?**

- a) 30    b) 42    c) 48

## History numbers

**1. Around which sea are the majority of the 7 Wonders of the Ancient World located?**

- a) the Mediterranean Sea  
b) the Aegean Sea  
c) the Dead Sea

**2. Which King Richard was also called Richard the Lionheart?**

- a) Richard I  
b) Richard III  
c) Richard IV

**3. What do the Roman numerals XCIX represent?**

- a) 71    b) 99    c) 119

**4. How many years did the Hundred Years' War actually last?**

- a) 95    b) 116    c) 200

**5. How many years were there between the start of the First World War and the start of the Second World War?**

- a) 20    b) 22    c) 25

**Team name:** \_\_\_\_\_

Answer sheet 3 (circle your chosen answer)

## Sport numbers

**1. If your football team wins 5 games in the Premier League, how many points does it get?**

- a) 20    b) 15    c) 30

**2. How many points does a Formula 1 team score in a race if the drivers finish in 1st and 2nd place?**

- a) 43    b) 25    c) 18

**3. The 1970 FA Cup Final was tied, with Chelsea beating Leeds United 2 - 1 in the replay. What was the UK television audience for the replay?**

- a) 28,000,000  
b) 16,500,000  
c) 8,500,000

**4. How many basic ballet positions are there?**

- a) 3    b) 5    c) 8

**5. According to a recent report, the average annual pay in the Women's Super League in England is £26,752 – while their male colleagues in the Premier League earn an average of around £50,800 per week. Which of these is the best estimate of the ratio of their salaries?**

- a) 20:1    b) 50:1    c) 100:1