National Numeracy Tests

# PROCEDURAL

# 9EP16

First name _____

Last name _____

School _____

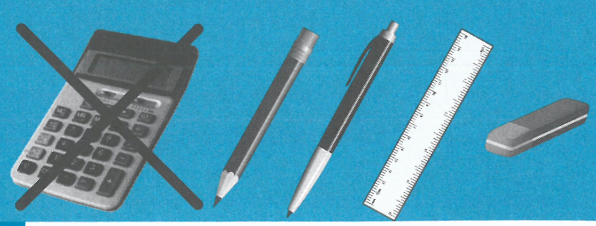
Class _____

Date of birth ◯◯ ◯◯ ◯◯◯◯

Date of test ◯◯ ◯◯ 2016

Total score ☐ (maximum 36)

139108



Llywodraeth Cymru
Welsh Government

**1**

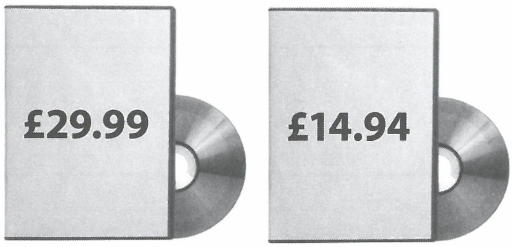
$2 \times 1\frac{1}{2} =$ ☐

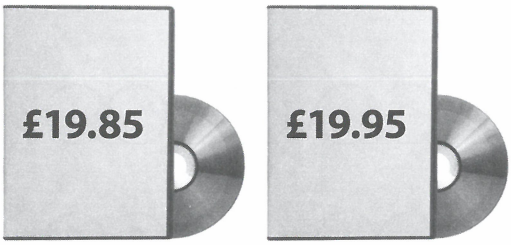
1m

Half of $1\frac{1}{2} =$ ☐

1m

**2** **Estimate** the total cost of these DVDs, to the nearest £.




£ ☐

1m

**3**

$10 \times (5.9 + \square) = 100$

1m

**4** Ahmed has:

- 25 ten-euro banknotes, and
- 15 five-euro banknotes.

How many euros does he have altogether?

euros

1m

**5** 5% of 120 =

1m

90% of 300 =

1m

**6** This formula converts °F to °C.


Use the formula to convert 50°F to °C.

°C

1m

TOTAL

8m

**7** Round 6868 to **2 significant figures**.

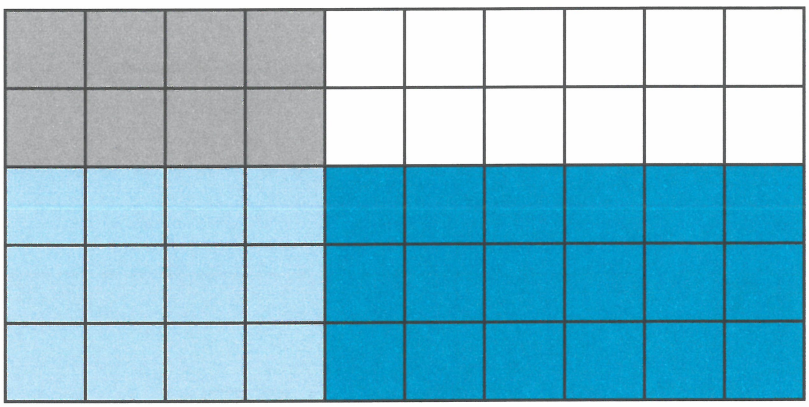
1m

**8** $10^2 \times$ ☐ $= 2000$

1m

**9** Four pupils want to be their school representative.

The grid shows the proportion of votes for each person.



**Key:** Votes for

- Kate (Year 8)
- Guto (Year 8)
- Beti (Year 9)
- Tony (Year 9)

What **fraction** of votes is for **Kate**?

Write your answer in its simplest form.

1m

What **percentage** of votes is for pupils in Year 9?

%

1m

**10** A map has a scale of 1 : 5000

How many metres does 1 centimetre on the map represent?

metres

1m

**11** Increase £72 by 25%.

£

1m

**12** Write the missing number.

| Inches | | Centimetres |
|---|---|---|
| 1 | = | 2.54 |
| 1.5 | = | |

1m

**13** $1\frac{1}{20}$ kilograms = grams

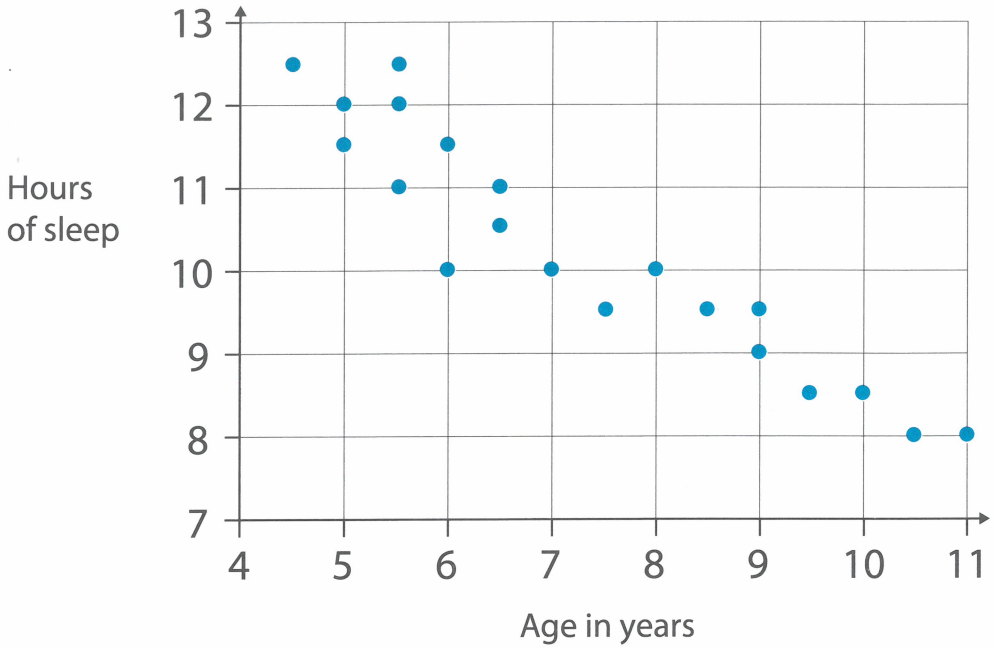
1m

TOTAL

8m

14

**How much sleep 20 children had last night**




How many of the 20 children slept for **less than** 12 hours?

children

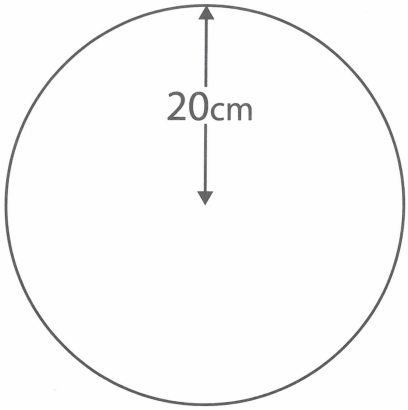
1m

What type of correlation does the scatter diagram show?

1m

**15** Work out the area of the circle.

Use $\pi = 3.14$




$\text{cm}^2$

2m

**16**

$200 - 2 \times 5^2 =$

1m

$(0.1)^2 =$

1m

$10^3 \div (8^2 + 6^2) =$

1m

TOTAL

7m

**17** The table shows how many pupils got each grade in a test.

| | Top grade (3 points) | Middle grade (2 points) | Lowest grade (1 point) |
|---|---|---|---|
| Number of pupils | 25 | 65 | 10 |

Work out the **mean** number of points for the test.

2m

**18**

179 Japanese Yen = £1

Which calculation below gives the number of £ in 1000 Japanese Yen?

Circle your answer.

1000 + 179 　　179 × 1000 　　179 ÷ 1000 　　1000 ÷ 179

1m

**19** Nadia wants to drive her caravan from her home to Fishguard.

Here is her plan:

| Number of miles on the motorway (average speed 60mph) | Number of miles not on the motorway (average speed 30mph) |
|---|---|
| 150 | 60 |

At those speeds, how long will her journey take?

hours

1m

**20**

Bank:

Save £6000 in one year and get 3% interest paid into your account at the end of the year, less a fee of £2 per month.

Eleri puts £6000 into her account at the beginning of the year.

How much does the bank pay into her account at the end of the year?

£

2m

TOTAL

6m

**21** $\frac{1}{12} = 0.0833333\ldots$ which is a recurring decimal.

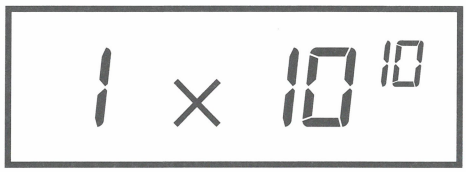
Circle the fractions below that do **not** convert to recurring decimals.

$\frac{2}{12}$ $\frac{3}{12}$ $\frac{4}{12}$ $\frac{5}{12}$ $\frac{6}{12}$

$\frac{7}{12}$ $\frac{8}{12}$ $\frac{9}{12}$ $\frac{10}{12}$ $\frac{11}{12}$

2m

**22** A calculator shows the answer to a question.




How many million is that?

million

1m

**23** A data set of **ten** numbers has a mean of 7

One more number is added; its value is 18

What is the mean of this bigger data set?

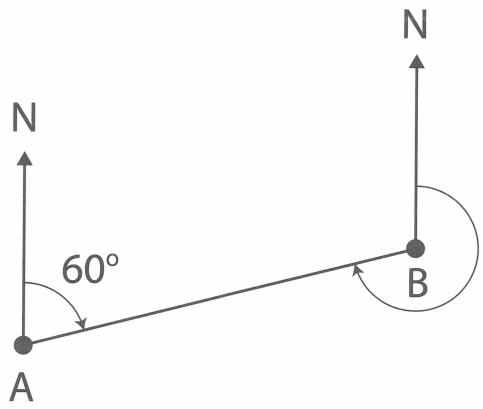
1m

**24** Write the fraction that is exactly halfway between 0.72 and $\frac{4}{5}$

Write the fraction in its simplest form.

2m

**25** The bearing of B from A is 060°




Not drawn accurately

What is the bearing of A from B?

o

1m

TOTAL

7m