

# YEAR 8 PROCEDURAL TEST B

## SOLUTIONS

**NAME:** .....

**Score:** ..... / 36

1. Here are the results from a recent survey.

**Do you prefer films or TV shows?**

Films (65%)	TV shows
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What percentage of people preferred TV shows?

**35 %** (1)

2. Add 2.35 to 7.44 **9.79**  
 ..... (1)

Subtract 2.35 from 7.44 **5.09**  
 ..... (1)

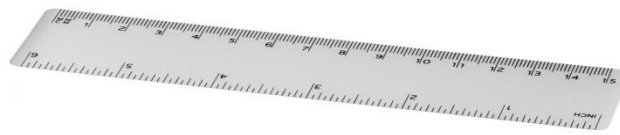
3.  $800 \div (5+3)$  **100**  
 ..... (1)

4. Find 75% of £40. **30**  
 £ ..... (1)

5. A bus leaves Swansea at 19:23 and arrives at Newport at 20:52  
 How many **minutes** long is the journey? **89** minutes (1)

6. 2.4 metres = **240** centimetres (1)

7. Work out the greatest number of these rulers you can buy with £10



**Rulers, £2.35 each**

**4**

..... rulers (1)

**7.2**

8.  $0.8 \times 9 =$  ..... (1)

**120**

9. Work out  $\frac{6}{7}$  of 140 ..... (1)

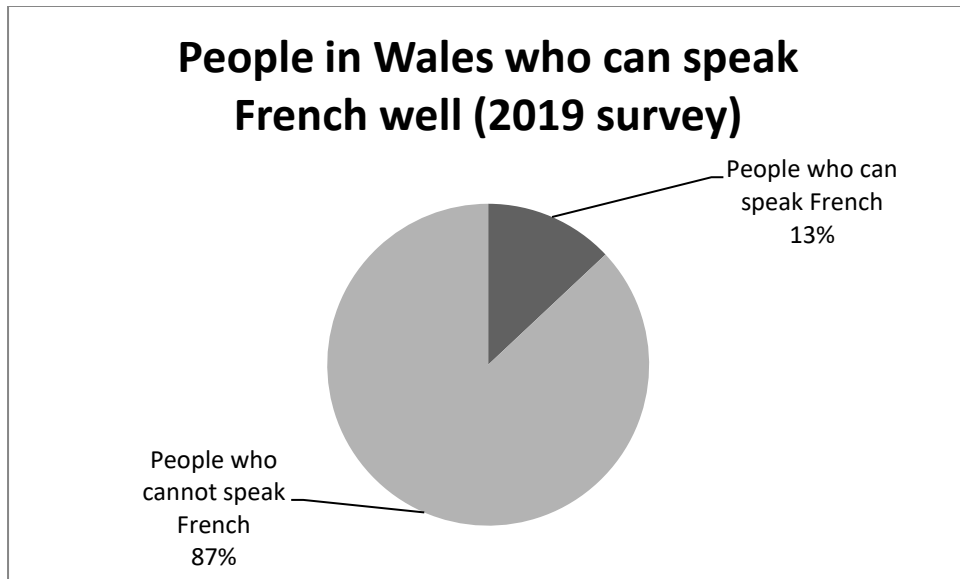
10. The area of a square is  $25\text{cm}^2$  **20**  
 What is the perimeter? .....cm (1)

11. Multiply 134 by 31

$$\begin{array}{r}
 134 \\
 \times 31 \\
 \hline
 134 \\
 4020 \\
 \hline
 4154
 \end{array}$$

..... (2)

12.



In 2019, about what proportion of people can speak French well?

- $\frac{1}{4}$        $\frac{1}{5}$        $\frac{1}{6}$        $\frac{1}{7}$        $\frac{1}{8}$        $\frac{1}{9}$       (1)

13. These grapes cost £1.80 for 750g.

What is the cost of 1kg of these grapes?

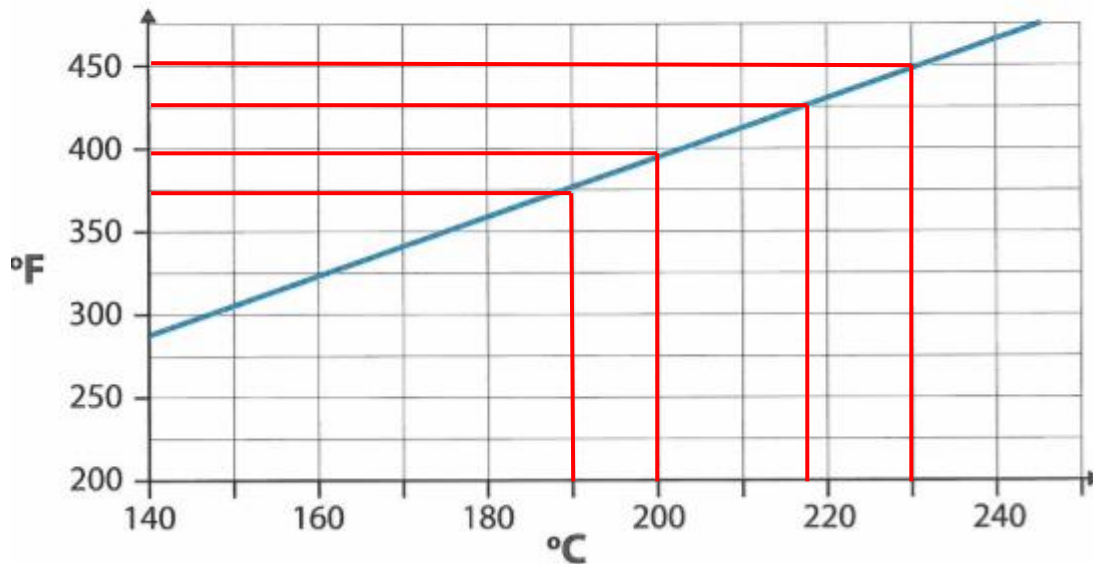


<b>250 g</b>	<b>=</b>	<b>£ 1.80/3</b>		
	<b>=</b>	<b>£ 0.60</b>		
<b>1000 g</b>	<b>=</b>	<b>4 x £ 0.60</b>		
	<b>=</b>	<b>£ 2.40</b>		
<b>1 kg</b>	<b>=</b>	<b>1000 g</b>	<b>=</b>	<b>£ 2.40</b>

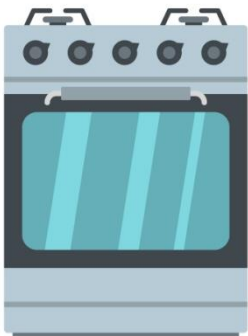
(2)

14.

Converting between °C and °F



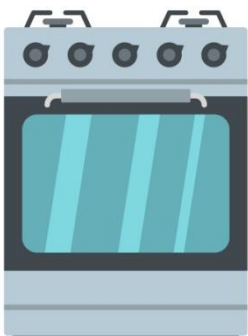
Use the graph to find the missing temperatures below.



Cake: Cook for 25 minutes at 190°C to 200°C.

Write the missing temperatures to the nearest 25°C.

Cook for 25 minutes at **375** °F to **400** °F. (1)



Pizza: Cook for 15 minutes at 425°F to 450°F.

Write the missing temperatures to the nearest 10°C.

Cook for 15 minutes at **220** °C to **230** °C. (1)



21. James does a time calculation. His calculator shows **5.4**  
the answer in minutes.

How long is this, in minutes and seconds? **0.4 mins = 0.4 x 60 s = 24 s**

5 minutes and **24** seconds (1)

22. A gardener charges £20 an hour. **0.3 x £20 = £6**

He reduces his prices by 30% for some customers. **£20 - £6 = £14**

What is his reduced price? £ **14** per hour. (1)

23. Work out  $\frac{1}{4} + \frac{2}{5} + \frac{3}{20}$   **$\frac{5}{20} + \frac{8}{20} + \frac{3}{20} = \frac{16}{20} = \frac{4}{5}$**

Write your answer as a fraction in its simplest form.

**$= \frac{4}{5}$**  (2)

24. A company makes a new flavouring of crisps.

They plan a large survey to find out if people like them. Tick the question below that best avoids bias (is fairest.)



- Are these the best crisps you have had this week?
- Everyone that we have asked likes our new crisps. Do you?
- On a scale of 1 (poor) to 5 (very good), how would you rate our new crisps?
- Which word describes our new crisps? Excellent/ Brilliant/ Good. (1)

25. 20% of a number is 16. **100 % = 5 x 16 = 80**  
 What is 75% of the number? **75 % =  $\frac{3}{4}$  x 80 = 60** (1)

26. These three numbers have a mean of 6 and a range of 0.

6	6	6
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Write three numbers that have a mean of 6 and a range of 6.

<b>3</b>	<b>6</b>	<b>9</b>
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**(There are other possible answers here, eg 4, 4, 10 or 2, 8, 8. The total needs to be 18 and the range needs to be 6.)** (1)

27. This triangle is an **isosceles** triangle. (not drawn full size)

Its area is 72 cm<sup>2</sup>.

What is the width of the triangle? (1)

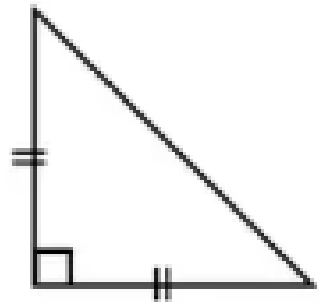
**Area =  $\frac{1}{2}$  x base x height**

**72 =  $\frac{1}{2}$  x base x height**

**144 = base x height**

**So base and height are both 12 cm because they are the same as**

**the triangle is isosceles. 12 cm** (1)



28.  $A = \sqrt{3^2 + 4^2}$   
 Work out the value of A.  
**A =  $\sqrt{9 + 16} = \sqrt{25} = 5$**  **A = 5** (2)

**END OF TEST. GO BACK AND CHECK YOUR WORK**