

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)

.....

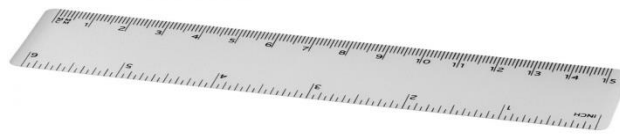
3. $800 \div (5+3)$ **100** (1)
-

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)

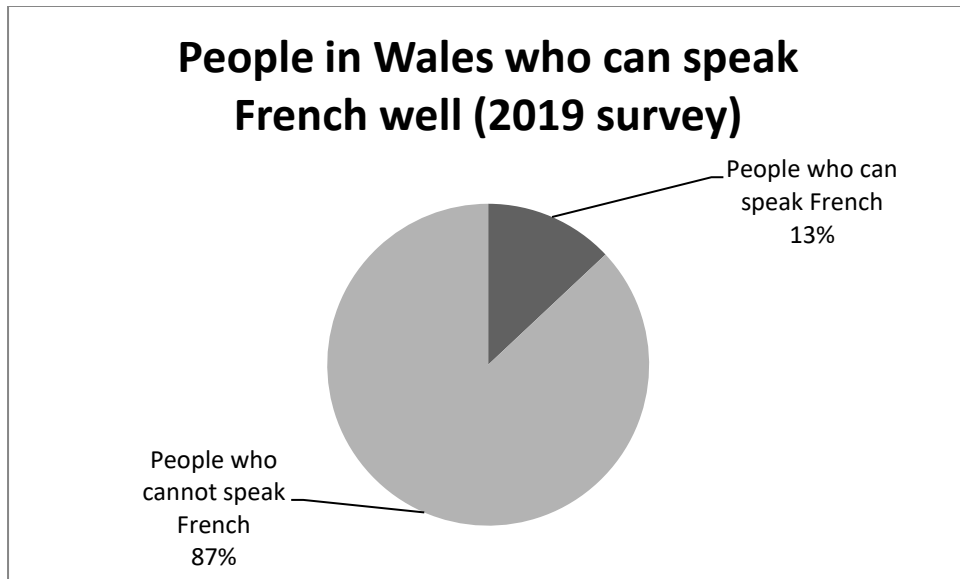
10. The area of a square is 25cm^2 **20**
 What is the perimeter?cm (1)

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.

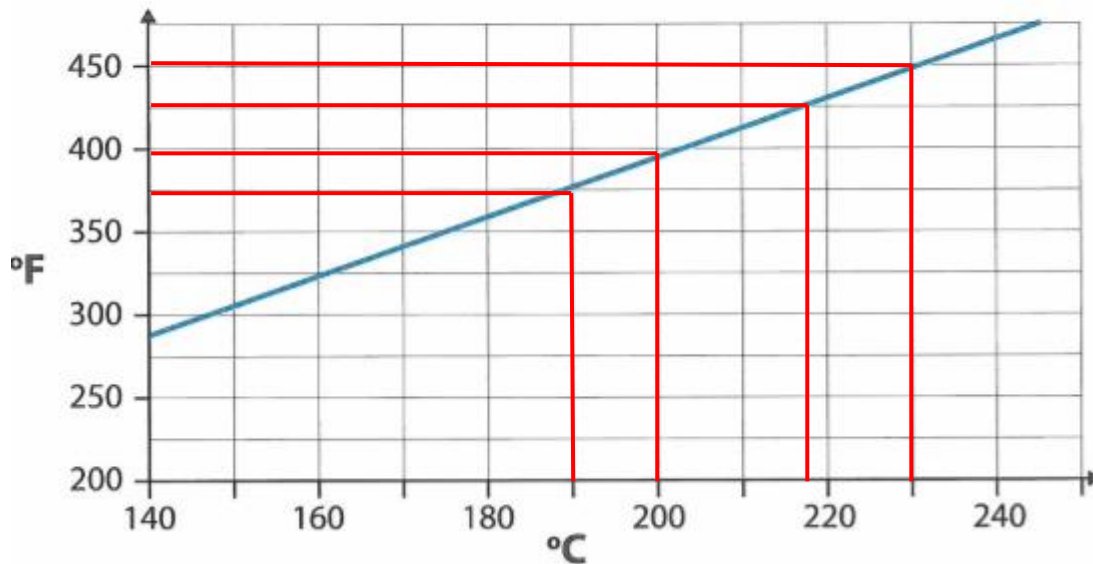
What is the cost of 1kg of these grapes?



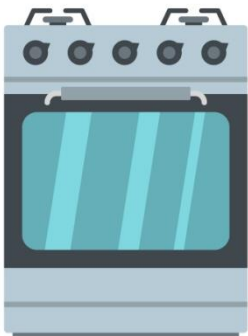
250 g	=	£ 1.80/3		
	=	£ 0.60		
1000 g	=	4 x £ 0.60		
	=	£ 2.40		
1 kg	=	1000 g	=	£ 2.40 (2)

14.

Converting between °C and °F



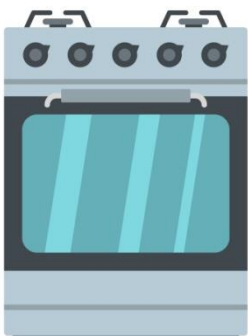
Use the graph to find the missing temperatures below.



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)

15. What number is 5 cubed? **125** (1)

16. Complete both values on this electricity bill.

1000 units at 21.4 p per unit : total £214.00 (1)

VAT at 5% of the total = £ **10.70** (1)

17. Circle the numbers that round to 4000 to **1 significant figure**.

4325 3943 3499
3800 4999 (1)

18. $2\text{m}^2 =$ **20 000** cm^2 (1)

19. Daisy is 114 cm tall. **114 : 190 (÷ 19)**

Her father is 1m 90cm tall. **6 : 10 (÷ 2)**

Write the ratio of their height in the form **3 : 5** (2)

20. 5 miles is about 8 kilometres. **7.5 miles**

To the nearest half mile, how many miles is 12 kilometres? (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.

3	6	9
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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 cm².

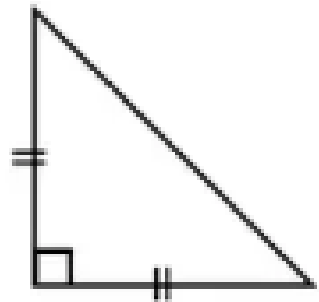
What is the width of the triangle? (1)

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