

## YEAR 9 PROCEDURAL TEST A

| NAME: | ••••• | • • • • • • • | • • • • • • • • | •••••• | • • • • • • • • • • • • |
|-------|-------|---------------|-----------------|--------|-------------------------|
|       |       |               |                 |        |                         |

Score: ..... / 36

1. 
$$25\%$$
 of  $400g = \dots g$  (1)

3. Natalie is looking into hiring a car for her summer holiday in Greece.



The cost of hire is £20 per day. How much does she have to pay to hire a car for 11 days?

4. ..... 
$$\div$$
 7 + 11 = 18 (1)



5. Beans are sold in 'snap pots' packs of four.



John needs to buy 17 'snap pots'. How many packs should he buy?

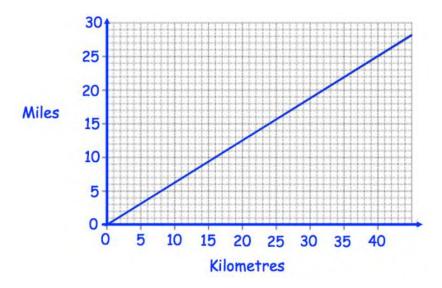
6. 
$$1000 - 27.7 + 35.2 = \dots$$
 (1)

7. Insert one pair of brackets to make this calculation correct.

$$80 \times 4 + 6 \div 2 = 400 \tag{1}$$

8. 
$$20\% \ of \ 80 = 40\% \ of \dots$$
 (1)

9. Conversion graph to change kilometres to miles





10. Gethin needs to buy a new school uniform for his son.



He decides to buy a blazer costing £34.99, a tie costing £3.99, trousers costing £13.99 and a shirt costing £11.95.

Estimate, to the nearest £, his change if he pays with two £50 notes.

(1)

12. 
$$\frac{1}{3} \times \frac{1}{3} = \dots$$
 (1)

13. 
$$\left(\frac{2}{5}\right)^2 = \dots$$
 (1)

14. Work out the **area** of a circle of radius 10 cm. Use  $\pi = 3.14$ .

...... cm<sup>2</sup> (2)



| 15. | If the distance between two places is 35 cm on a map, and the scale is, <b>5cm = 1 km</b> , how far apart are they actually?                                          |     |  |  |  |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|--|--|
|     | km                                                                                                                                                                    | (1) |  |  |  |
|     | A group say that they walk at average speed of 6 km per hour. From map they calculate the distance they will need to walk as 15 km. At t speed how long will it take? |     |  |  |  |
|     | hours                                                                                                                                                                 | (1) |  |  |  |
| 16. | $0.4 \times 0.2 = \dots$                                                                                                                                              | (1) |  |  |  |
|     | $8 \div 0.04 = \dots$                                                                                                                                                 | (1) |  |  |  |
| 17. | Decrease £45 by 10%                                                                                                                                                   |     |  |  |  |
|     |                                                                                                                                                                       | (1) |  |  |  |
| 18. | $3^2 \times 3^4 = \dots$                                                                                                                                              | (1) |  |  |  |
|     | $2^{11} \div 2^4 = \dots$                                                                                                                                             | (1) |  |  |  |
| 19. | Circle the value that is equivalent to 6%                                                                                                                             |     |  |  |  |
|     | 6.0 0.6 6.00 0.06 0.006                                                                                                                                               | (1) |  |  |  |
| 20. | Write the fraction that is exactly halfway between $\frac{1}{3}$ and $\frac{1}{2}$ .                                                                                  |     |  |  |  |
|     |                                                                                                                                                                       | (2) |  |  |  |



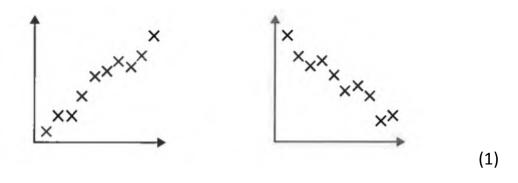
21. A year 9 class were asked how many certificates they had received since joining their school. The 15 students who had received the most are shown in this table.

| Number of students | Number of certificates |  |
|--------------------|------------------------|--|
| 1                  | 21                     |  |
| 2                  | 19                     |  |
| 2                  | 14                     |  |
| 4                  | 15                     |  |
| 6                  | 12                     |  |

What fraction of these students had received more than 15 certificates?

Altogether, how many certificates had these students received?

22. Tick the scatter graph that shows **positive** correlation.



23.

Formula to change temperature in °C to °F

Multiply the temperature in  ${}^{\circ}\text{C}$  by  $\frac{9}{5}$  then add 32



24.

| Before a pay rise | After a pay rise |  |
|-------------------|------------------|--|
| £9.00             | £9.50            |  |

Circle the value that shows the approximate percentage increase

**2**% **4**% **6**% **8**% **10**% (1)

 $\frac{2}{3} = 0.\,\dot{6}$ 

26. This table shows information about a group of teenagers.

| Their <b>mean</b> age | Range of their ages  |  |
|-----------------------|----------------------|--|
| 15 years and 3 months | 2 years and 2 months |  |

Complete this table to show information about **the same group** of teenagers exactly **two years later**.

| Their <b>mean</b> age | Range of their ages |  |  |
|-----------------------|---------------------|--|--|
| years and months      | years and months    |  |  |

(2)

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