

Nat 5 Numeracy Practice Test

① $DM = 100 + 4.3 = 104.3\% = 1.043 \checkmark$

Value today = $(1.043)^5 \times 124000 \checkmark$

= $\pounds 15305.34866 \dots \checkmark$

= $\pounds 15300 \checkmark$

④

② $350 \text{ ml} = 0.35 \text{ L} = 0.35 \text{ kg} + 0.055 = 0.405 \text{ kg}$

1 case = $0.405 \times 24 = 9.720 \text{ kg} \checkmark$

500 trays = $500 \times 9.720 = 4860 \text{ kg} = 4.86 \text{ tonnes} \checkmark$ ③

Yes it can deliver in a single van as $4.86 \text{ tonnes} < 5 \text{t}$ \checkmark

③ Dollars to Spend = $1200 \times 1.24 = \$ 1488 \checkmark$

Total Spent = $14 \times 95 = \$ 1330$

Remainder = $1488 - 1330 = \$ 158 \checkmark$

Pounds returning = $158 \div 1.24 = 127.41935 \dots$

= $\pounds 127.42 \checkmark$

④ a) $11:46 \text{ GMT} \xrightarrow{-5 \text{ hr} \checkmark} 06:46 \text{ Florida}$
 $06:46 \xrightarrow{14 \text{ min}} 07:00$
 $07:00 \xrightarrow{9 \text{ hrs}} 16:00$
 $16:00 \xrightarrow{11 \text{ min}} 16:11$

Flight time = $9 \text{ hrs } 25 \text{ min} \checkmark$

b) BA = $2 \times 1250 = \text{€}2500$ ✓

UA = $2 \times 690 + 3 \times (690 \div 2) = \text{€}2415$ ✓

AF = $2 \times 1025 + 610 = \text{€}2660$ ✓

(3)

United Airlines are the cheapest deal.

(5) His front tyre is at 105 psi ✓

His tyre should be between 107-115 psi ✓

He needs to increase the pressure from between 2 to 10 psi ✓

(3)

(6) Cola + Pepsi = $\frac{2}{9} + \frac{1}{5} = \frac{10}{45} + \frac{9}{45} \checkmark = \frac{19}{45} \checkmark$

Rest = $1 - \frac{19}{45} = \frac{26}{45} \checkmark$

(3)

(7) a) Ian : Heather : Paul
2 : 3 : 1
 $\times 1400$ {
2800 : 4200 : 1400

Heather will get €4200 ✓
Paul €1400 ✓

(2)

b) Number of shares = $2 + 3 + 1 = 6$

Number of stamps per share = $9000 \div 6 = 1500$ ✓

Paul gets 1500 stamps ✓

Ian get 3000 stamps ✓

Heather gets 4500 stamps ✓

(4)

⑧ $P(\text{girls cycling}) = \frac{3}{8+7+15} = \frac{3}{30} = \frac{1}{10}$ ✓ (2)

⑨ a) 42 hours ✓

b) \bar{x} boys = $\frac{3+6+8+9+11+12+14+17+17+18+19+22+26+27+28+28}{16}$

= $\frac{265}{16}$ ✓

= 16.5625 ✓

≈ 16.6 hours

c) \bar{x} girls = $\frac{371}{15} = 24.73$ hours

Median boys = 17 hours ✓

Median girls = 26 hours

(Either average comparison)

On average the girls use the websites considerably more than the boys each week. ✓

⑩ a) Petunias = 70 ✓

b) Pansies = 5 ✓

c) Marigolds ✓

d) $35 - 20 = 15$ begonias ✓

e) $A+Q = 15 + 45 = 60$

Marbles = $40 + 5 = 45$

$A+Q$ sold more geraniums + pansies ✓

(5)

(5)

$$\begin{aligned} \textcircled{11} \text{ a) } \angle \text{ of grilled} &= 360 - (90 + 40) \\ &= 360 - 130 \\ &= \underline{\underline{230^\circ}} \quad \checkmark \end{aligned}$$

$$\text{b) (i) } \frac{90}{360} \times 540 = 135 \text{ people} \quad - \text{ Oven} \quad \checkmark$$

$$\text{(ii) } \frac{40}{360} \times 540 = 60 \text{ people} \quad - \text{ Fried} \quad \checkmark$$

$$\text{c) } \frac{230}{360} \times 540 = 345 \text{ people} \quad - \text{ Grilled} \quad \checkmark$$

$\textcircled{4}$