

North Wales Castle Maths Answers

Part 1.

Solve the following clues to calculate how many Easter eggs are hidden in each castle.

Castle	Clue	Number of hidden eggs
Caernarfon	The distance between Caernarfon and Harlech.	45
Harlech	The product of the number of letters in the word Conwy and the total number of castles on the map.	$6 \times 8 = 48$
Beaumaris	The second shortest distance between any two of the castles.	14
Conwy	The distance between Flint and Conwy to 1 significant figure.	$57.5 = 60$
Rhuddlan	The difference between the distance of Caernarfon to Flint, and the distance of Caernarfon to Conwy.	$91.7 - 38.7 = 53$
Denbigh	Round the longest distance between any two castles to the nearest whole number. Subtract 100 from the result.	115.3 rounded to nearest whole number = 115 $115 - 100 = 15$
Flint	If $a = 1$, $b = 2$, $c = 3$, etc., find the value of the sum of the letters in Flint.	$6 + 12 + 9 + 14 + 20 = 61$
Hawarden	The distance between Caernarfon and Conwy to 2 significant figures.	39

Part 2.

Start (Caernarfon)

to Beaumaris (20.5)

to Conwy (37.1)

to Rhuddlan (27.3)

to Denbigh (14)

to Flint (38.1)

to Hawarden (12.6)

to Harlech (105.4)

and back to Caernarfon (45)

= 300km (The same route in reverse is also a valid solution.)

Part 3.

- a) What is the total number of Easter eggs that could be collected on the hunt if you found every one?

$$45 + 48 + 14 + 60 + 53 + 15 + 61 + 39 = 335$$

- b) Assuming you travelled at an average speed of 50km/h, calculate how long your journey took.

Give your answer in hours.

$$300 \div 50 = 6 \text{ hours.}$$

Or (their answer for part 2) $\div 50$

- c) If you spent 30 minutes in each castle, how long did your Easter egg hunt last including travelling?

$$8 \text{ castles} \times 0.5 = 4 + 6 = 10 \text{ hours.}$$

Or $4 +$ (their answer for b)

- d) If you started your hunt at 8am, what time will you finish? Give your answer in the 24-hour clock.

$$8\text{am} + 10 \text{ hours} = 18:00 \text{ finish.}$$

Or $8\text{am} +$ (their answer for c)