MATHEMATICKS!

> Use the 2020 tick surveillance data below to answer the questions

Of the 7,534 blacklegged ticks that were found:

- **1** in **6** ticks carried the bacteria that causes Lyme disease

- **1** in **115** ticks carried the bacteria that causes anaplasmosis

- **1** in **204** ticks carried the bacteria that causes *Borrelia miyamotoi* disease

- **1** in **5,000** ticks carried the parasite that causes babesiosis

Of the 718 western blacklegged ticks that were found:

- **1** in **705** ticks carried the bacteria that causes *Borrelia miyamotoi* disease

- No tick carried the bacteria that causes Lyme disease

* Source: Tick surveillance in Canada: Ixodes scapularis and Ixodes pacificus ticks and their associated pathogens in Canada, 2020

ANSWER THE QUESTIONS BELOW.

1 How many ticks (blacklegged and western blacklegged) were found in total?

CALCULATION   ANSWER

2 What was the percentage of blacklegged ticks?

CALCULATION   ANSWER

3 What was the percentage of western blacklegged ticks?

CALCULATION   ANSWER

▶ Bonus questions!

4 What was the number of blacklegged ticks that carried Lyme disease (round up)?

CALCULATION   ANSWER

5 Come up with a mathemaTICKS question. Write down your calculation and your answer.

QUESTION

CALCULATION   ANSWER

Credit: Catherine Hogan and Muhammad Morshed, Parasitology Laboratory, BCCDC Public Health Laboratory

WESTERN BLACKLEGGED TICK

BLACKLEGGED TICK

MATHEMATICKS! ANSWERS

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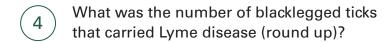
* Source: <u>Tick surveillance in Canada: Ixodes scapularis and Ixodes pacificus ticks and their associated pathogens in Canada, 2020</u>

QUESTIONS

1 How many ticks (blacklegged and western blacklegged) were found in total?

> **7,534 + 718**

CALCULATION

8,252

ANSWER

2 What was the percentage of blacklegged ticks?

> **7,534 ÷ (7,534 + 718) x 100**

CALCULATION

91.3 %

ANSWER

3 What was the percentage of western blacklegged ticks?

> **718 ÷ (7,534 + 718) x 100**

CALCULATION

8.7 %

ANSWER

Bonus questions!

4 What was the number of blacklegged ticks that carried Lyme disease (round up)?

(1 ÷ 6) x 7,534 = 1,256

CALCULATION

1,256

ANSWER

5 Come up with a mathemaTICKS question. Write down your calculation and your answer.

QUESTION

CALCULATION

ANSWER

Credit: Catherine Hogan and Muhammad Morshed, Parasitology Laboratory, BCCDC Public Health Laboratory

WESTERN BLACKLEGGED TICK

BLACKLEGGED TICK