Equipment Room

Coach's Corner Solutions

Unit 3: Logic and Reasoning Lesson 3.1
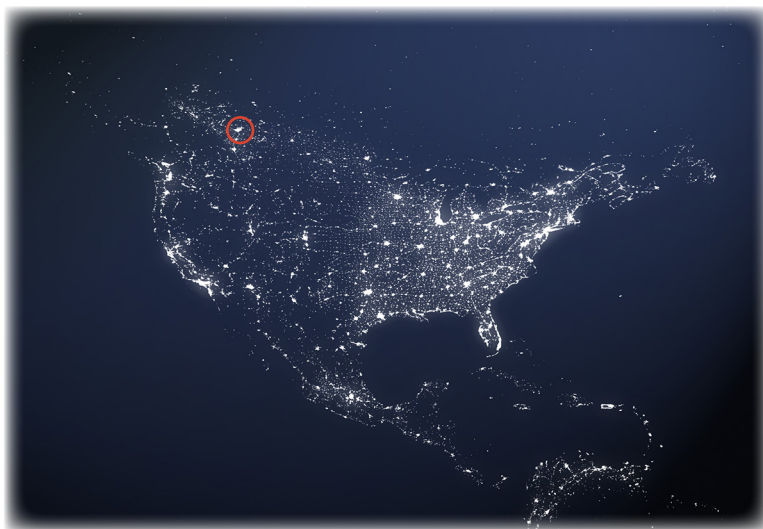
Coach's Corner – I

1. The picture below is a composite photograph made by satellites at night. Make a conjecture based on this photograph.

© gettyimages/Chris Downie

Some possible conjectures are:
* This is a picture of North and Central America.
* The larger the white spot, the more populous the area.
* Edmonton is located inside the red circle.

© gettyimages/Chris Downie

2. Make a conjecture about adding even numbers. Show at least 3 examples to support your conjecture.

A possible conjecture for adding even numbers is:
Adding two even numbers will always result in an even number.

Examples:
$2 + 4 = 6, 18 + 40 = 58, 34 + 92 = 126$

3. Make a conjecture based on the following data.

Canadian farm operators by gender and age (2001 and 2006 Census of Agriculture)		
Group	**2001**	**2006**
Males	255 015	236 220
Under 35	29 430	22 170
35 to 54	132 060	114 695
55 and older	93 530	99 360
Median age	49	52
Females	91 180	90 835
Under 35	10 490	7 755
35 to 54	53 510	49 465
55 and older	27 175	33 615
Median age	48	50
Source: Statistics Canada		

Some possible conjectures are:

- There will be fewer than 327 055 Canadian farm operators in 2020. (The number 327 055 is the sum of the male and female farm operators from the year 2006, which is a smaller sum than for the year 2001.)
- There were fewer female farm operators in Alberta in 2006.
- The median age of Canadian farm operators in 1970 was below 48.

Please return to *Unit 3: Logic and Reasoning Lesson 3.1* to continue your training.