Name: _____ Date: _____

BLM 8–10

Section 8.4 Math Link

This worksheet will help you with the Math Link on page 311.

The temperature of still, dry air decreases by about 6 °C for each kilometre increase in altitude. On a still, dry day, the temperature in Yellowknife, Northwest Territories, was −11 °C. The air temperature outside a plane flying above Yellowknife was −53 °C.

1. What is the approximate difference between the temperature in Yellowknife and the temperature outside the plane? _____

2. What would the temperature be for each of these distances above Yellowknife?

a) 1 km: _____ **b)** 2 km: _____

c) 3 km: _____ **d)** 4 km: _____

e) 5 km: _____ **f)** 6 km: _____

g) 7 km: _____ **h)** 8 km: _____

i) 9 km: _____

3. At what altitude was the temperature −53 °C? _____

4. Describe a method of finding the answer to #3 without using the pattern in #2. Show the calculations that you would use.