

0 8

Food security is when a population has enough food to stay healthy.

Lack of food security is a global problem.

One way to maintain food security is to increase the efficiency of food production.

Figure 10 shows how some pigs are farmed using intensive methods.

Figure 10

**0 8 . 1**

Some people think the farming methods shown in **Figure 10** are unethical.

Suggest **two** other possible disadvantages of intensive farming methods.

[2 marks]

1 _____

2 _____

A newspaper reported that:

'Food security is a serious problem in remote communities in Canada. This is because Aboriginal communities are eating fewer traditional foods.'

One traditional food eaten by Aboriginal communities in Canada is seal.

Look at **Table 4**.

Table 4

Year	Number of seals caught in thousands
2004	362
2005	316
2006	348
2007	224
2008	215
2009	91
2010	67

0 8 . **3** Calculate the percentage (%) decrease in the number of seals caught from 2004 to 2010.

[2 marks]

Decrease in seals = _____ %

0 8 . **4** The conclusion in the newspaper might **not** be correct.

Suggest **two** reasons why.

[2 marks]

1 _____

2 _____

Turn over for the next question

Question 8

Question	Answers	Extra information	Mark	AO / Spec. Ref.
08.1	any two from: <ul style="list-style-type: none"> diseases spread more rapidly antibiotics can build up in the food chain or <ul style="list-style-type: none"> over use of antibiotics increased use of fossil fuels (to heat the barn) 		2	AO3/1b 4.7.5.2
08.2	Level 2: Clear statements made identifying the farming methods which are linked to relevant explanations of how this increases the efficiency of food production.		3–4	AO2/1 4.4.2.1 4.4.2.3 4.5.2.4 4.7.5.2
	Level 1: Simple statements made identifying the farming methods used, but no attempt to link to explanations of how this increases the efficiency of food production.		1–2	
	No relevant content		0	
	Indicative content statements: <ul style="list-style-type: none"> kept inside or in a temperature controlled environment kept enclosed or in a restricted environment explanations: <ul style="list-style-type: none"> less energy / heat is lost in controlling body temperature less energy required for movement so more energy is available for growth less energy / heat is transferred to the environment 			
08.3	$(362 - 67 = 295)/362 \times 100$		1	AO2/2 4.7.5.2
	81 / 81.49 / 81.5	allow 81 / 81.49 / 81.5 with no working shown for 2 marks	1	AO2/2 4.7.5.2

Question 8 continues on the next page

Question 8 continued

Question	Answers	Extra information	Mark	AO / Spec. Ref.
08.4	aboriginal people can eat other foods (so they may not be in food insecurity)		1	AO3/1b 4.7.5.2
	we do not know if other (traditional) food sources have declined		1	AO3/1b 4.7.5.2
Total			10	