

Processing Average increase/decrease

For higher biology candidates—the systolic number is the larger initial number e.g. for individual 1 the systolic number initially was 120 and final was 146. Ignore the lower number each time.

A study was carried out into the effect of caffeine on blood pressure.

The blood pressure of four individuals was measured before and after consumption of a drink containing caffeine.

The results are shown in the table.

Individual	Initial blood pressure (mmHg)	Final blood pressure (mmHg)
1	120/75	146/97
2	115/79	132/99
3	127/86	159/100
4	118/80	139/96

The average increase in systolic blood pressure was

- A 18
- B 24
- C 72
- D 96.

Mink is a naturalised mammal in many parts of the UK.

A program designed to control mink numbers in a region of Scotland was started at the end of May 2009. The population of adult animals was surveyed every three months for a year and the results are shown in the table below.

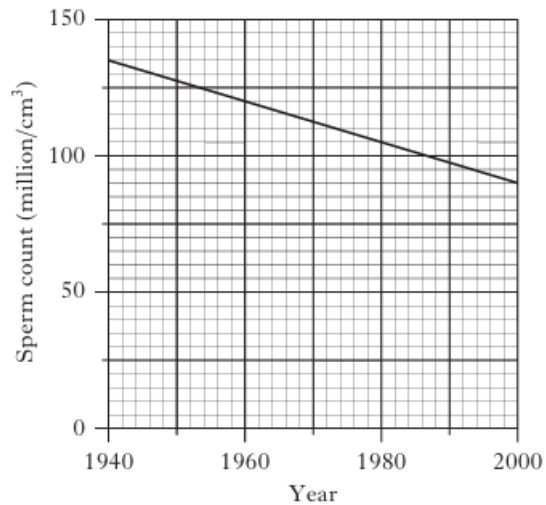
<i>Survey date</i>	<i>Population of adult mink</i>
End May 2009	1250
End August 2009	750
End November 2009	520
End February 2010	340
End May 2010	50

What was the average decrease in number of adult mink per month during the programme?

- A 100
- B 240
- C 243
- D 582

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16. The sperm counts of a sample of men taken between 1940 and 2000 are shown in the graph below.



What is the average reduction in sperm count per year?

- A 0.67 million/cm³/year
- B 0.75 million/cm³/year
- C 0.92 million/cm³/year
- D 45 million/cm³/year

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1. B
2. A
3. B