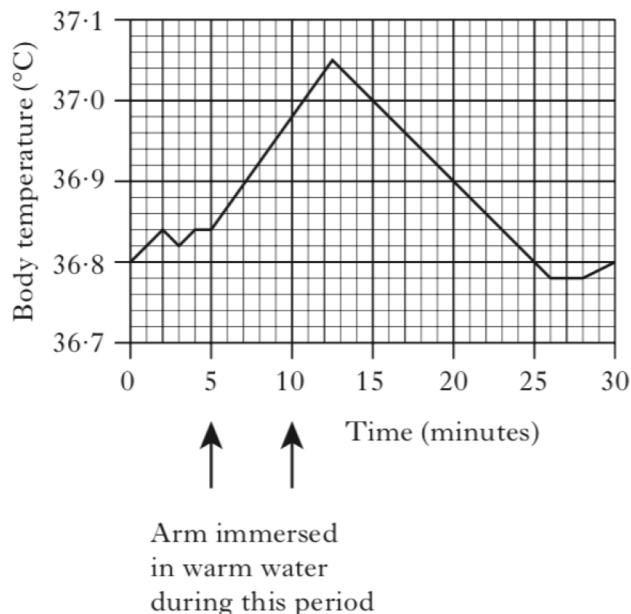


1.1 The graph below records the body temperature of a woman during an investigation in which her arm was immersed in warm water for 5 minutes.



By how much did the temperature of her body vary during the 30 minutes of the investigation?

- A 2.7°C
- B 0.27°C
- C 2.5°C
- D 0.25°C

1.2 Cardiac output is calculated using the following formula:

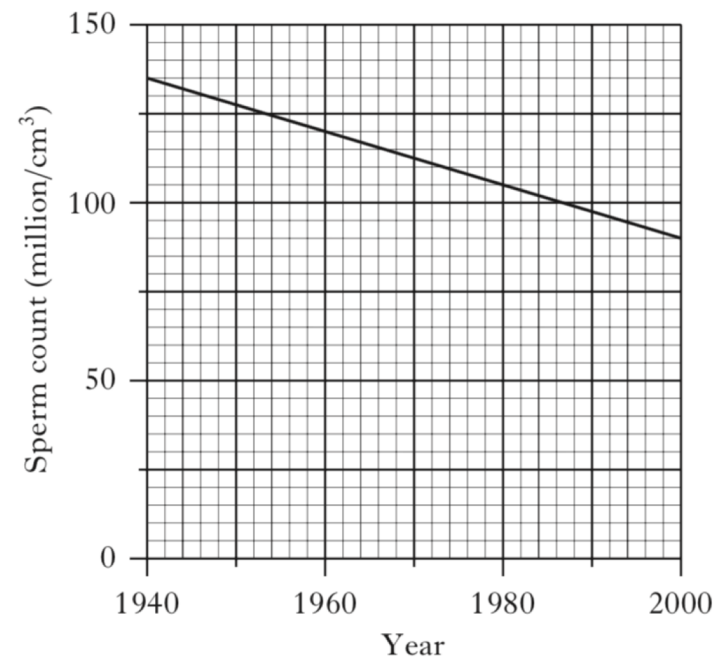
$$\text{Cardiac output} = \text{Heart Rate} \times \text{Stroke Volume}$$

The table below shows the heart rate and cardiac output of four individuals.

Individual	Heart Rate (bpm)	Cardiac Output (L/min)
A	60	5.8
B	68	6.1
C	72	7.2
D	78	7.6

Which individual has the greatest stroke volume?

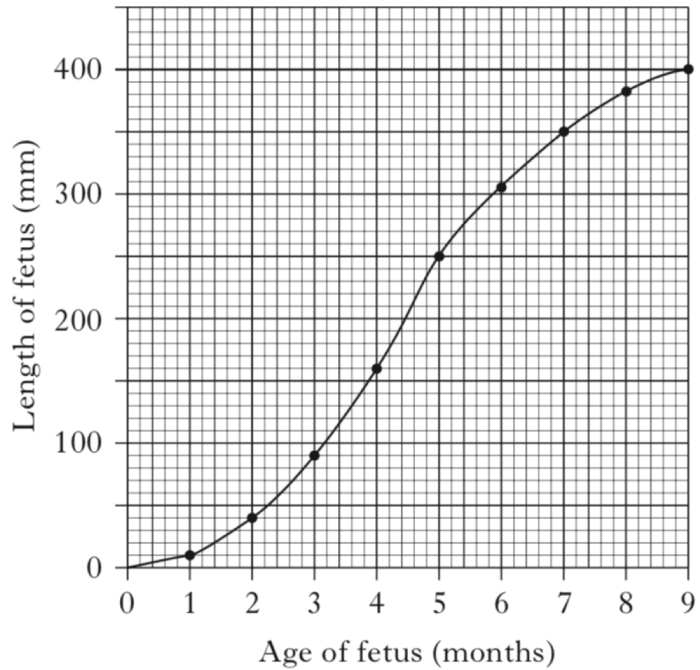
1.3 The sperm counts of a sample of men taken between 1940 and 2000 are shown in the graph below.



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

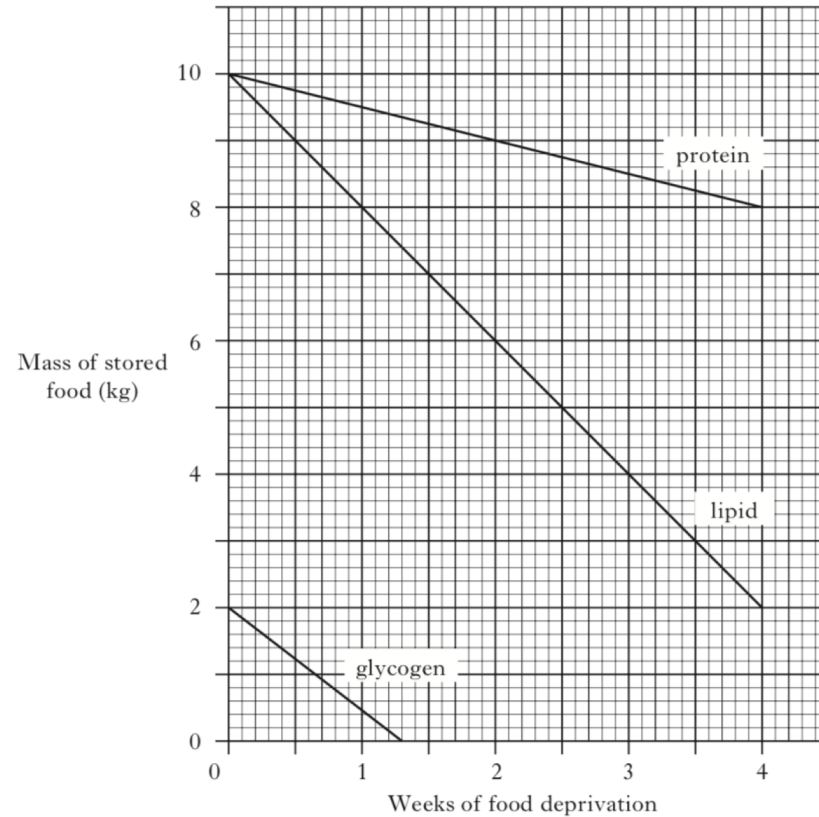
- 1.4 The graph below shows the growth in length of a human fetus before birth.



What is the percentage increase in length of the fetus during the final 4 months of pregnancy?

- A 33.3
- B 60.0
- C 62.5
- D 150.0

- 1.5 The graph below shows the changes which occur in a body's food stores during four weeks of food deprivation.



Which of the following conclusions can be drawn from the graph?

- A The glycogen food store decreases at the fastest rate during week one.
- B Between weeks three and four the body gains most energy from protein.
- C Each food store decreases at a constant rate during week one.
- D Between weeks one and four the body only gains energy from lipid and protein.

