1 A person's heart beats approximately 10^5 times each day.
A person lives for approximately 81 years.

(a) Work out an estimate for the number of times a person's heart beats in their lifetime.
Give your answer in standard form correct to 2 significant figures.

.....

(2)

2×10^{12} red blood cells have a total mass of 90 grams.

(b) Work out the average mass of 1 red blood cell.
Give your answer in standard form.

..... grams

(2)

(Total for Question 1 is 4 marks)

2 (a) Write 1.63×10^{-3} as an ordinary number.

.....

(1)

(b) Write 438 000 in standard form.

.....

(1)

(c) Work out $(4 \times 10^{3}) \times (6 \times 10^{-5})$
Give your answer in standard form.

.....

(2)

(Total for Question 2 is 4 marks)

3 (a) Write 6.75×10^{-4} as an ordinary number.

.....

(1)

(b) Work out $\dfrac{2.56 \times 10^{6} \times 4.12 \times 10^{-3}}{1.6 \times 10^{-2}}$

Give your answer in standard form.

.....

(2)

(Total for Question 3 is 3 marks)