AQA Level 3 Certificate MATHEMATICAL STUDIES

Paper 2A – Predicted Paper for 2026

Time allowed: 1 hour 30 minutes

Instructions

- Use black ink or black ball-point pen.
- Answer all questions.
- Show all your working.

Information

- The maximum mark for this paper is 60.
- You may use the Preliminary Material for reference.

Answer all questions.

Question 1 **[4 marks]**

From 2015 to 2021, combined PC and console revenue reached \$94.3 billion.
Between 2023F and 2026F, revenue is forecast to grow by \$13.4 billion.

(a) In 2023F, the revenue was \$94.0 billion. Calculate the forecast revenue for 2026F. [1]

(b) The growth from 2023F to 2026F is described as a CAGR of 4.5%. Explain what this means in context. [2]

(c) Suggest one reason why forecasted growth is lower than the growth seen before 2020. [1]

Question 2 **[5 marks]**

The number of PC players is forecast to grow from 2023F to 2026F with a CAGR of 1.6%.
In 2026F, the number of PC players is expected to be 909 million.

(a) Use the CAGR formula to estimate the number of PC players in 2023F.

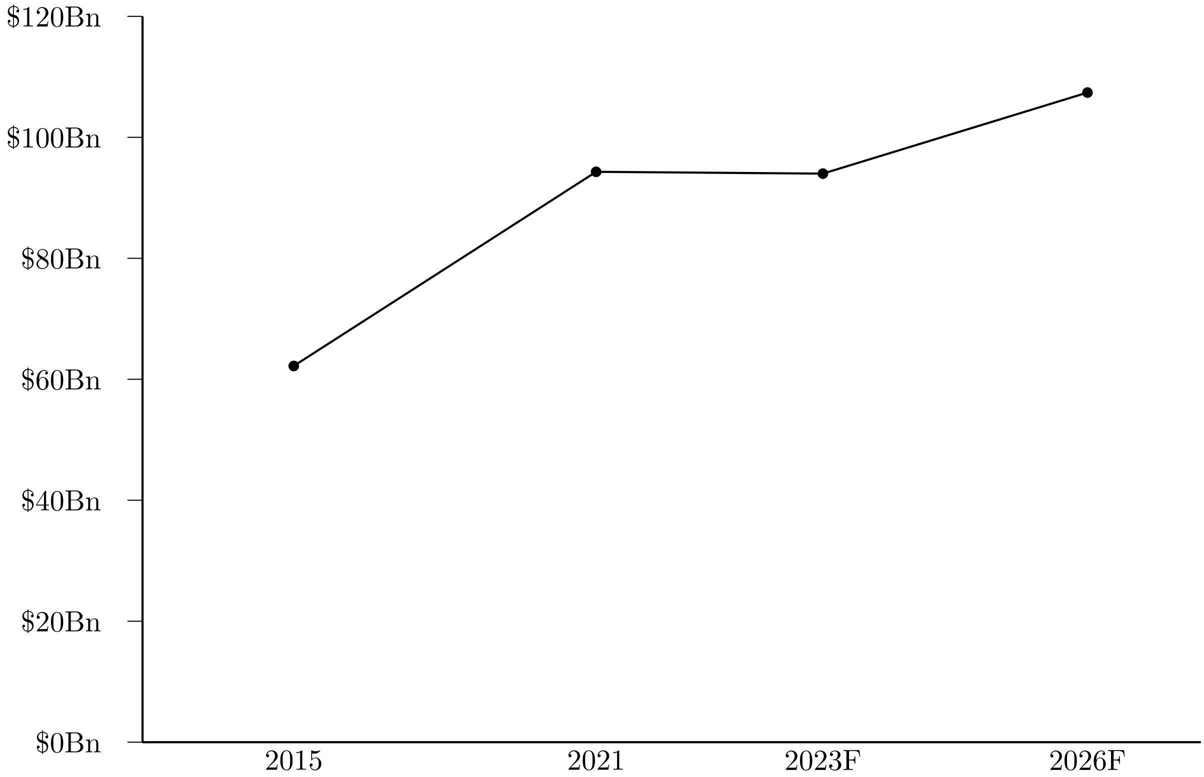
$$\text{CAGR} = 100\left(\sqrt[t]{\frac{N_t}{N_0}} - 1\right)$$

Take $t = 3$. [3]

(b) Comment on whether this growth rate suggests a rapidly expanding market. [2]

Question 3 **[6 marks]**

Graph 1: PC and Console Revenue Growth



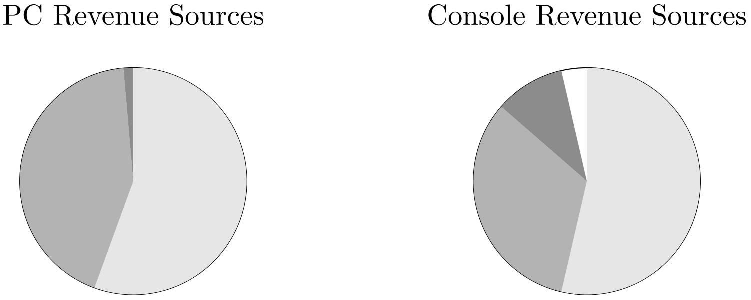
(a) Estimate the percentage increase in revenue from 2015 to 2021. [2]

(b) Between 2021 and 2023F, revenue fell slightly. Give one possible reason for this. [1]

(c) Use the graph to comment on the long-term trend in revenue from 2015 to 2026F. [3]

Question 4 **[5 marks]**

Graph 2: Revenue Sources (2023)



In 2023, premium purchases made up 56% of PC revenue and 57% of console revenue.

(a) Give one reason why premium revenue share is higher for consoles. [1]

(b) If total PC revenue in 2023 was $40 billion, calculate the revenue from premium purchases. [2]

(c) Explain why recurring revenue (microtransactions + subscriptions) is important for developers. [2]

Question 5 **[6 marks]**

A 2023 survey found:

- 53% prefer F2P games
- 39% prefer premium games
- 9% prefer subscription games

A sample of 1200 players was surveyed.

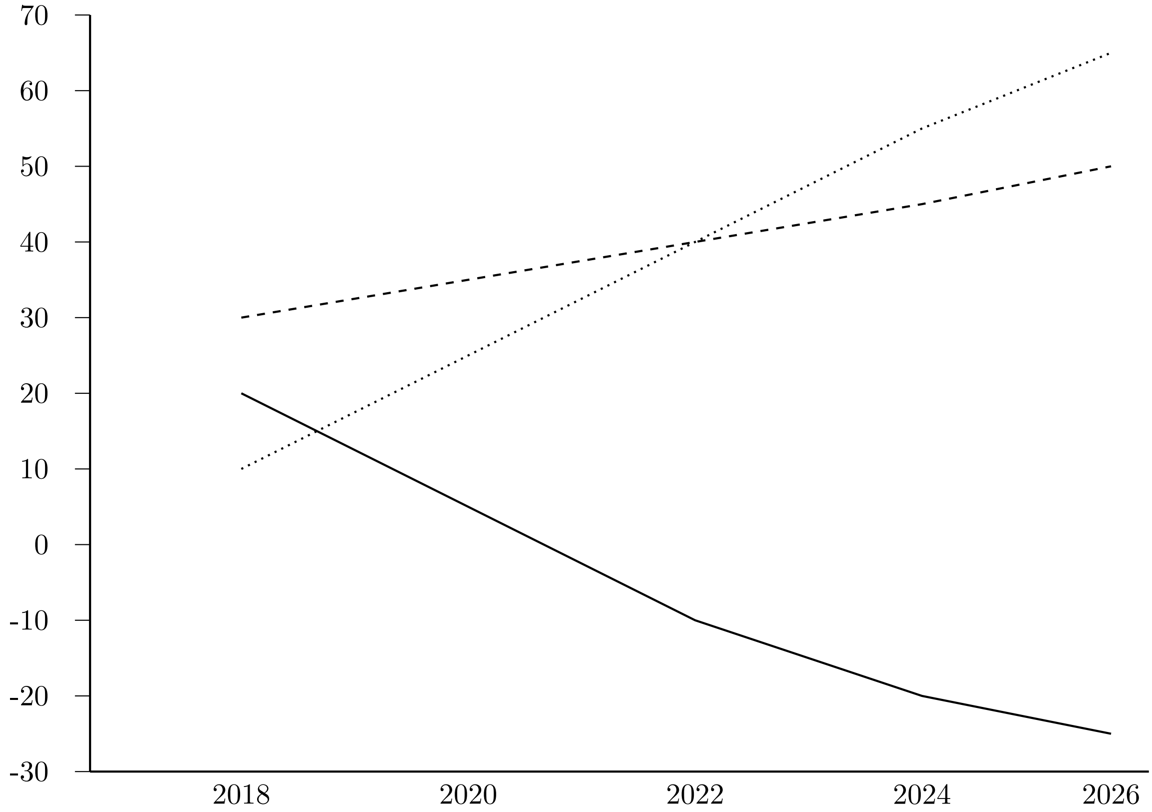
(a) Calculate how many players preferred F2P games. [2]

(b) Calculate how many more players preferred premium games than subscription games. [2]

(c) Give one limitation of this survey. [2]

Question 6 **[7 marks]**

Graph 3: Revenue Growth by Game Type



(a) Which game type had the highest growth in 2026? [1]

(b) Describe the trend for physically sold games from 2018 to 2026. [2]

(c) Compare the growth of downloaded games and cloud gaming between 2018 and 2024. [2]

(d) Suggest one reason why cloud gaming has grown rapidly. [2]

Question 7 **[7 marks]**

PAYG (Pay-as-you-go) games charge players based on time played.
A PAYG game charges \$0.40 per hour.
A player spends:

- 12 hours in week 1
- 18 hours in week 2
- 10 hours in week 3

(a) Calculate the total amount the player pays over the three weeks. [2]

(b) A subscription for the same game costs \$12 per month. Compare the two payment methods and state which is cheaper for this player. [3]

(c) Give one advantage of PAYG for players and one disadvantage for developers. [2]

Question 8 **[10 marks]**

A cloud gaming company had revenue of \$28 billion in 2018. By 2023, revenue had increased to \$50 billion.

(a) Calculate the percentage increase in revenue from 2018 to 2023. [2]

(b) Use the CAGR formula to calculate the CAGR over this 5-year period. [4]

(c) The company forecasts that revenue will continue to grow at this CAGR. Estimate the revenue in 2026. [3]

(d) State one assumption you have made. [1]

END OF PAPER