

小六數學溫習摘要

Primary 6 Mathematics Revision Summary

6D2 折線圖

6D2 Line Graphs

把各個時點的數據標成點，再按時間次序連線，可以清楚顯示數量如何隨時間改變。

Plot values at their time points and connect them in order to show change over time.

學習重點

What to learn

- 先讀圖題、兩軸的意思和單位，再確定一小格表示多少。
Read the title, both axes, units and the value of one small interval.
- 每一個點代表一組時間和數量；找準對應位置，才讀出數值。
Each point links a time with a quantity; align both coordinates before reading.
- 由左至右觀察：折線向上表示增加，向下表示減少，水平表示數量不變。
From left to right, rising, falling and level segments show increasing, decreasing and unchanged values.
- 複合折線圖用不同線條表示不同組別；先按圖例辨認，再比較同一時點的數量。
For multiple lines, identify each series from the key and compare values at the same time.

考試前必記

Remember before a test

- 求某段時間增加或減少多少，計算該段兩端數值的差。
Find a period's change by subtracting its endpoint values.
- 比較變化快慢，要同時看數量變化和時間長短；不能只看上升了多少。
Compare change together with the elapsed time, not just the size of the increase.
- 製圖時保持時間和數量刻度一致，標上單位，準確畫點，再依次用直線連接。
Use consistent scales, label units, plot accurately and connect consecutive points with straight segments.
- 若數據先按要求湊整，圖中表示的也是近似數據；連線不能保證兩點之間每一刻都按直線變化。
A graph of rounded data shows approximations. A joining line does not prove the exact change between observations.

常見錯誤

Common mistakes

- 把一大格當成一小格，讀錯數據大小。
Confusing a major interval with a minor interval.
- 把相隔不同時間的兩段直接比較高低變化，忽略時間尺度。
Ignoring unequal time intervals when comparing changes.
- 連錯組別的點，或跳過中間時點，造成不存在的趨勢。
Joining points from different series or skipping observations.
- 把預測或兩點之間的估讀值說成已量得的準確數值。
Presenting a prediction or interpolation as an observed exact value.

快速自查

Quick check

☐ 能按刻度準確讀點 I can read plotted points using the scale.	☐ 能描述上升下降及不變 I can describe changes and flat segments.
☐ 能用圖例區分多條線 I can distinguish series using a key.	☐ 能計算指定時間內的變化 I can calculate changes over a stated period.

自編例題

Original worked example

觀察箱內的幼苗在第 1、3、5 天分別高 4、7、8 cm。在哪一段記錄期間長得較快？

A seedling in an observation box is 4, 7 and 8 cm tall on days 1, 3 and 5 respectively. During which recorded interval does it grow faster?

思考與解答：第 1 至 3 天增加 3 cm，第 3 至 5 天增加 1 cm；兩段都是 2 天，所以前一段長得較快。

Reasoning and answer: It grows 3 cm from day 1 to day 3, and 1 cm from day 3 to day 5. Both intervals last 2 days, so it grows faster in the first interval.

再試與答案：若一大格代表 20，每大格有 5 小格，一小格代表多少？答案： $20 \div 5 = 4$ 。

Further practice and answer: One large interval represents 20 and contains 5 small intervals. What does each small interval represent? Answer: $20 \div 5 = 4$.