



QUESTION WORKBOOK

Inequalities and inequations

Further Pure 1 · Year FM

6 questions · 20 marks

NAVY SCREEN EDITION

SECTION A · Warm-up

- A1** Explain why multiplying both sides of $x/(x - 4) < 1$ by $x - 4$ is unsafe, and state the safe first step. [2]

- A2** Solve $(x - 1)/(x + 2) > 2$. [3]

SECTION B · Standard

- B1** Solve $|x - 3| < 2x$. [4]

- B2** Solve $|x^2 - 4| > 3x$, giving exact values. [4]

- B3** For a weak inequality such as $(x + 3)/(x - 2) \geq 0$, explain which critical values may be included in the solution set and which never can. [3]

SECTION C · Stretch

- C1** Solve $x/(x + 1) \leq 3/(x - 1)$, giving exact values. [4]