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QUESTION WORKBOOK

# Partial fractions

Algebra and functions · Year 12–13

6 questions · 20 marks

PRINT EDITION

**SECTION A** · Warm-up

**A1** Express  $(3x + 5)/((x + 1)(x + 2))$  in partial fractions. [2]

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**A2** In the method above, explain why substituting  $x = -1$  finds A immediately. [2]

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**SECTION B** · Standard

**B1** Express  $(6x^2 + 5x - 2)/(x(x - 1)(x + 2))$  in partial fractions. [4]

**B2** Express  $(2x + 7)/(x + 3)^2$  in partial fractions. [4]

**B3** Express  $(x^2 + 4x + 5)/((x + 1)(x + 2))$  in partial fractions. [4]

**SECTION C** · Stretch

**C1** Express  $(3x^2 + 7x + 8)/((x + 1)^2(x + 2))$  in partial fractions. [4]