**Simplifying and Substituting (H)**

Post-Intervention Assessment

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Class: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **Question** | **Objective** | **RAG** |
| 1 | Expand quadratics |  |
| 2 | Factorise quadratics |  |
| 3 | Simplify algebraic fractions |  |
| 4 | Expand cubics |  |
| 5 | Use inverse and composite functions |  |

**1.** Expand and simplify (x + 5)(x + 9)

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**2**. Factorise x ² + 11x + 30

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**3.** Simplify fully

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**4.** Show that

(x + 1)(x + 2)(x + 5) = x³ + 8x² + 17x + 10

for all values of x.

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**5.** The functions f and g are such that

f(*x*) = 1 − 5*x*      and      g(*x*) = 1 + 5*x*

Show that gf(1) = − 19

[Glue here]