SOUTH AFRICAN COLLEGE HIGH SCHOOL

Grade 9	**Mathematics**
February 2023	**PRACTICE TEST**
25 Marks 30 Mins	**NAME:** _____

Simplify as far as possible:

1. $5p - 2p(p + 3)$

[2]

2. $\left(2t - \dfrac{1}{3}\right)^2$

[3]

3. $2(x - 3)^2 - 4(2x - 3) - (x - 2)(x + 2)$

[5]

Factorise fully:

4. $\dfrac{4}{81} - x^6$

[2]

5. $a^3(x + y) - a(y + x)$

[3]

Simplify as far as possible:

8. $\dfrac{p^2 - 4p}{6p^2 - 4p^3} \div \dfrac{2p^2 - 18p + 40}{4p^2 - 9} \times \dfrac{3p^2 - 15p}{6p + 9}$

[5]

Solve for the x in each of the following equations:

9. $\dfrac{x}{3} - \dfrac{3x - 6}{6} = \dfrac{x - 6}{2} - 2$

[5]