Name:

QUIZ – MATH GRADE 11 SL

1. (50%) :

   a. (5%) Add $2^{-2} + (16)^{-1} =$

   b. (5%) Write as a fraction $-(-5)^{-2} =$

   c. (5%) Write as a fraction $2x^{-2} =$

   d. (5%) Simplify $36^{\frac{1}{4}} =$

   e. (5%) Write as a fraction $\left(\frac{-4}{3}\right)^{-2} =$

   f. (5%) Expand and simplify $\left(\frac{2+\sqrt{3}}{4}\right)^{-2} =$

   g. (10%) Use exponents to simplify $\left(\frac{25}{49}\right)^{2} \div \left(\frac{7}{125}\right)^{-3} =$

   h. (10%) Write in the form 3^n $\left(\frac{1}{27}\right)^{-3} \cdot \frac{27\sqrt{3}}{3^{\frac{3}{4}}9^{-1}} =$

2. (50%) Simplify as much as possible:

a. (15%) $\dfrac{(4a^3)^5 b}{2a^{-2}}\,2a =$

b. (15%) $\dfrac{b^{-5}(a^{-3})^{-3}}{(ba)^{-2}b^{-5}} =$

c. (10%) $\dfrac{5^n + 5^{n-1} + 5^{n+1}}{5^{n+1}} =$

d. (10%) $\dfrac{(9^2 27^n)^3}{(3^{1+n})^{-1}81^{2n}} =$