## QUIZ - MATH GRADE 11 IB SL

1. (100%) Calculate/Simplify as much as possible:

a. 
$$(7\%) (-2)^{-1} =$$

h. 
$$(15\%)$$
 Write in the form  $3^k$ 

b. 
$$(8\%) (-3)^{-2} =$$

$$\left(\frac{3^{-1}}{9^2}\right)^{-4} =$$

c. 
$$(10\%) - 3^{-2} - 5^{-1} =$$

d. 
$$(10\%) - (-2)^{-2} - 2^{-1} =$$

$$\left(\frac{25}{8}\right)^{-4} \div \left(\frac{32}{125}\right)^{-2} =$$

e. 
$$(10\%) \left(\frac{3}{90}\right)^{-1} =$$

f. 
$$(10\%) \left(\frac{-1}{2}\right)^{-2} =$$

**Bonus** (10%) Write the following in the form  $3^a$ 

g. 
$$(15\%)$$
 Write in the form  $2^k$ 

$$\left(\frac{1}{9}\right)^{-2} \cdot \frac{81 \cdot 27^{-2}}{3^5 9^{-2}} =$$

$$\frac{2^3 \cdot 16}{2^{-2}} =$$