Practice worksheet | Exponentials and logarithms

Integer and fractional index laws

Name: _____ Date: _____

6 questions | 14 marks

1. Evaluate 2^{-3}. [2 marks]

2. Evaluate $32^{2/5}$. [2 marks]

3. Evaluate $16^{-3/4}$. [2 marks]

4. Simplify a^4a^3/a^2 for $a \neq 0$. [2 marks]

5. Simplify $(16x^4)^{3/4}$ for $x > 0$. [3 marks]

6. Check the claim $(9 + 16)^{1/2} = 9^{1/2} + 16^{1/2}$ and explain the error. [3 marks]