

- be able to use the exponent laws
- be able to solve exponential equations
- be able to quick sketch exponential functions
- solve several types growth and decay problems

Knowledge & Skills	I have reviewed it	I have done questions	I think I've got this
Exponent Laws			
Multiplying Powers $a^m \times a^n = a^{m+n}$			
Dividing Powers $a^m \div a^n = a^{m-n}$			
Power to an Exponent $(a^m)^n = a^{m \times n}$			
What does a negative exponent mean? Ex. 2^{-5}			
What does a rational (fraction) exponent mean? Ex. (a) $8^{\frac{1}{3}}$ (b) $64^{\frac{2}{3}}$			
Evaluating using a calculator Ex. $30(1.08)^{-5}$			
Solving Exponential Equations			
By getting a "common base" Ex. Solve $3^{\frac{x}{2}} = 81$			
Growth and Decay Problems			
Setting up the equation given information using $F = I(G)^t$			
Exponential GROWTH when $G > 1$ Ex. Population doubles, triples, goes up 30%, etc.			
Exponential DECAY when $G < 1$ Ex. Half-life, goes down by 30%, etc.			
Quick sketch the application.			
Finding final amount, F			
Finding how long, t			