4/26 Algebra1 - Downing

Review:

1) $\frac{4x^5y^2}{6x^3y^7} = \frac{2x^2}{3y^5}$ 2) $(2x^3y^4)(3x^1y^5z^1) = 6x^4y^9z$ 3) $x^6y^{-4}x^2 = \frac{x^8}{y^4}$

Go over test

Intro to Exponential Functions

	Time (days)		Population		
	0		2		
+1	1	×3	6	+4	
+1	2	×3	18	+12	+8
+1	3	×3	54	+36	+24

Not Linear

Not Quadratic

multiplied by 3

★ As the x-values increase by a constant amount, the y values are multiplied by a constant amount

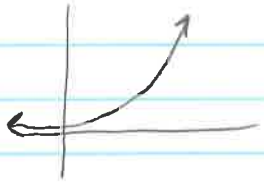
Exponential Function - has the form $f(x) = ab^x$ x is an exponent, $a \neq 0$

a = starting value $b \neq 1$

b = how that number is multiplied each time $b > 0$

Exponential Growth -

Is when $b > 1$



Ex: $y = 500(1.035)^x$ ← 3.5% growth

$y = (2)^x$

Exponential Decay -

Is when $0 < b < 1$

Ex: $y = 500(.98)^x$ ← 2% decrease