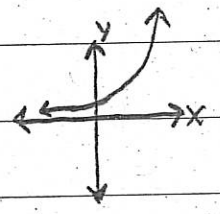
Exponential Functions

$y = a \cdot b^x$, where $a \neq 0$, $b > 0$, $b \neq 1$, x is a real number

Examples:



x	1	2	3	4
y	3	12	48	192

+1 +1 +1

×4 ×4 ×4

Evaluate each function for the given value.

① $F(x) = 3 \cdot 2^x$, where $x = 5$

$= 3 \cdot 2^5$

$= 3 \cdot 32$

$= \boxed{64}$

② $y = 18(.015^x)$, $x = 3$

$y = 18(.015^3)$

$y = 18(.000003375)$

$y = .00006075$

$\boxed{y = 6.075 \times 10^{-5}}$

Graph $y = .2(3^x)$

x	y	x	y
-3	.0074	2	1.8
-2	.0222	3	5.4
-1	.0667	4	16.2
0	.2	5	48.6
1	.6	6	145.8