Draw the following exponentials: Name

y = (1/2)3x y = 2x − 8

 

y = (2)3-x y = 2-x + 16

 

y = (5)3x − 100 y = 100(1/4)x + 80

 

|  |  |  |
| --- | --- | --- |
| To find an equation of the form y = A(bx) + C  (i) Find the asymptote. This will be y = C  (ii) Find the y-int. Plug in & solve for A.  (iii) Find a convenient 3rd pt. Plug in and solve for b.  (iv) Graph to check. | Example:  (i) Asymptote y = 6. C = 6  (ii) y-int = (0, 0) plug in (0, 0) 0 = Ab0 + 6  0 = A + 6, A = -6  (iii) plug in (1, 4)  4 = -6(b1) + 6  b = 1/3  So, y = -6 (⅓)x + 6 |  |

 

 

 