1. *Calculating Doubling Time & Half-Life*
   Solve for x:

   a. $2 = (e^{0.12x})$

   b. $0.5 = (0.88)^x$

2. Use the *ratio test* to determine which data tables might represent an exponential relationship? If you think an exponential function might be a good fit to the data, write a rule for that function.

a.

x	y
0	4
1	5.6
2	7.84
3	19.976

b.

x	y
0	100
1	70
2	49
3	34.3

c.

x	y
0	8
1	13
2	23
3	38

3. Sketch graphs for each of the following *power functions*.
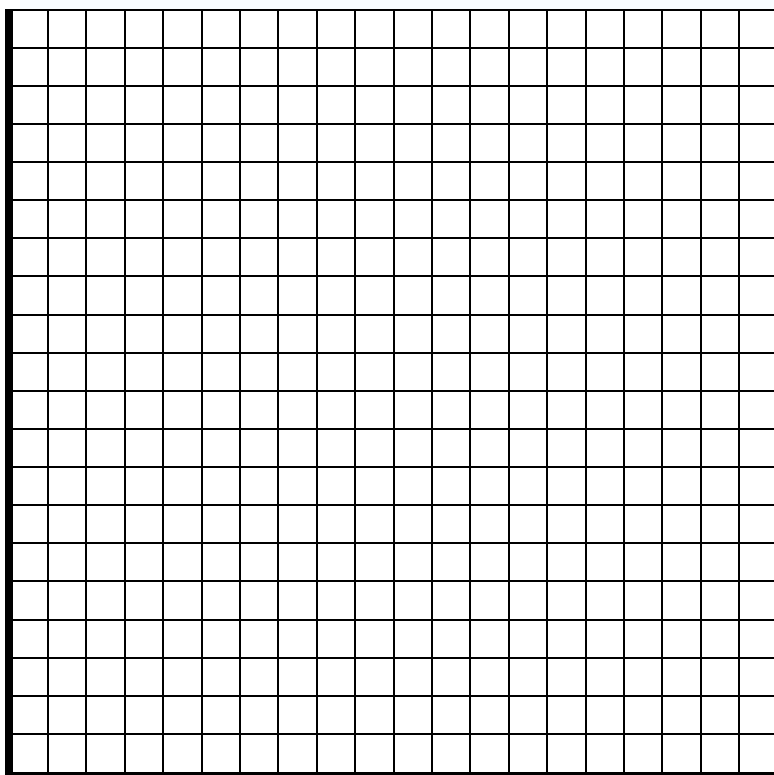
a. $y = x^2$

b. $y = 3x^2$

c. $y = x^{0.5}$

d. $y = 3x^{0.5}$

e. $y = x$

4. Sketch graphs of the following *power functions*.

a. $y = 4x^{1.5}$ b. $y = 4x^{0.67}$ c. $y = 0.1x^3$ d. $y = 2x^{0.33}$