Exponential Functions
More Graphing Practice

Name key

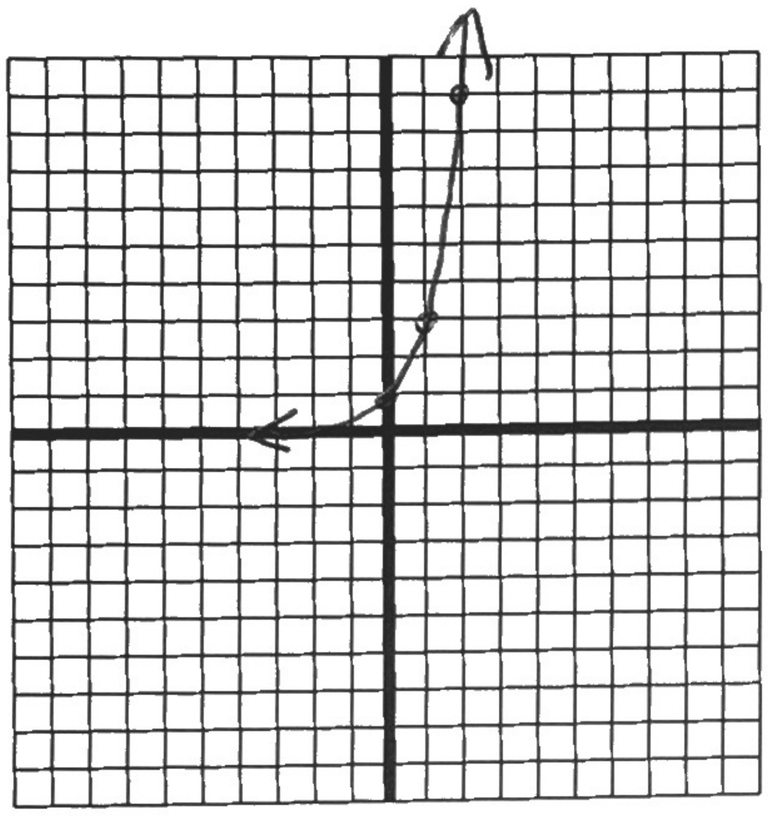
GSE Coordinate Algebra

1. $f(x) = 3^x$

Growth or Decay?

Asymptote: $y = 0$

x	y
-2	1/9
-1	1/3
0	1
1	3
2	9

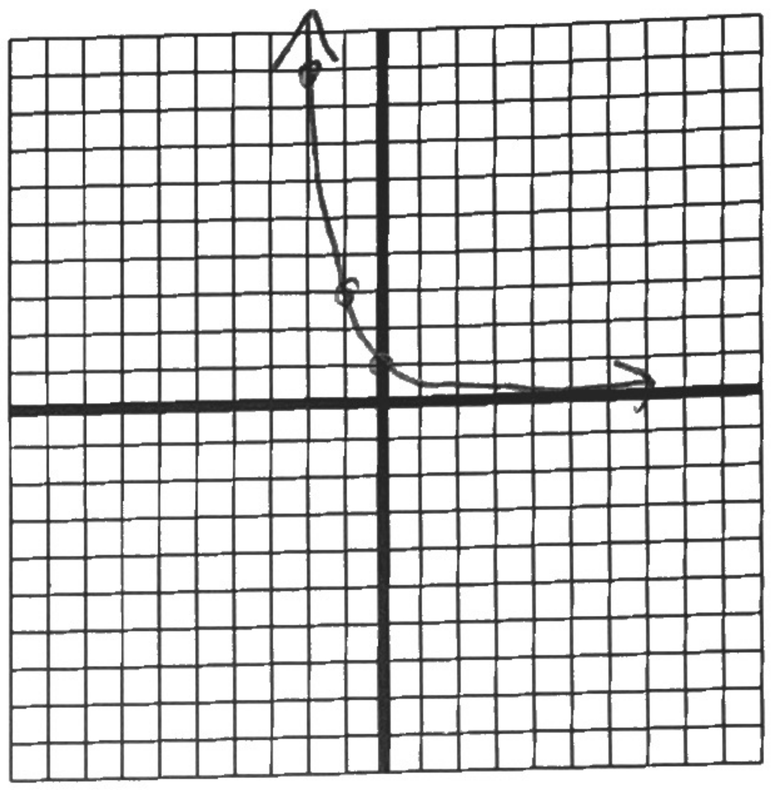


2. $f(x) = \left(\frac{1}{3}\right)^x$

Growth or Decay?

Asymptote: $y = 0$

x	y
-2	9
-1	3
0	1
1	1/3
2	1/9

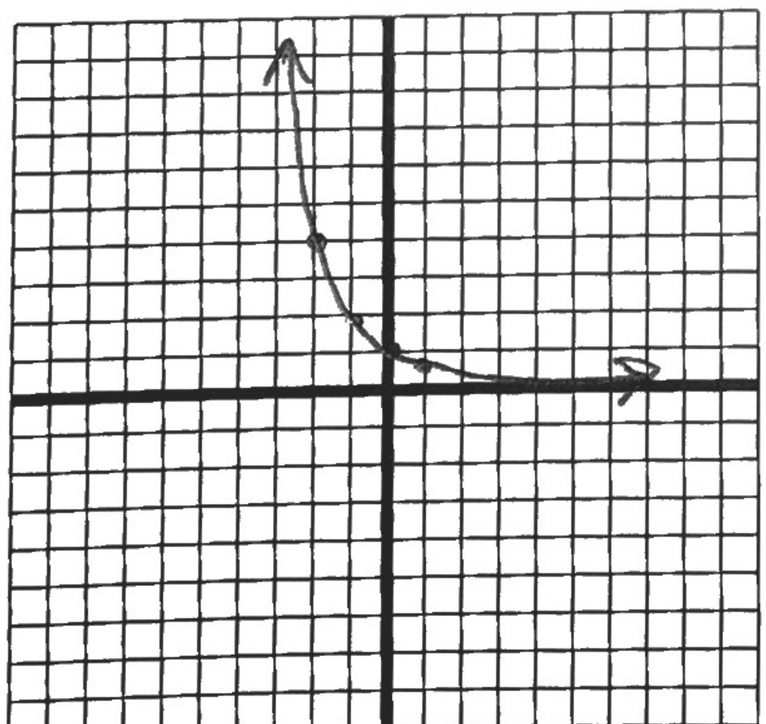


5. $f(x) = \left(\frac{1}{2}\right)^x$

Growth or Decay?

Asymptote: $y = 0$

x	y
-2	4
-1	2
0	1
1	1/2
2	1/4



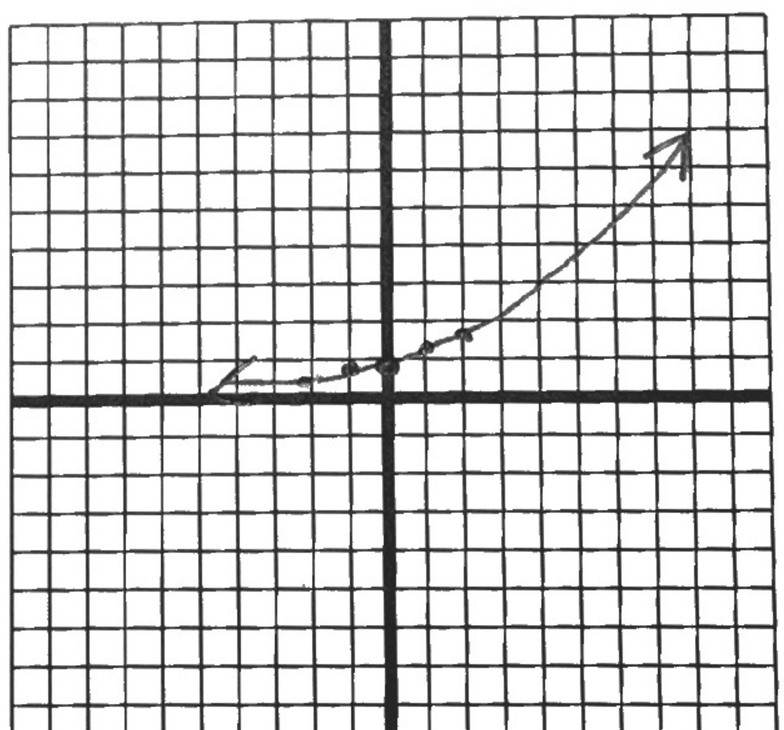
change

6. $f(x) = \left(\frac{4}{3}\right)^x$

Growth or Decay?

Asymptote: $y = 0$

x	y
-2	9/16 = 0.5625
-1	3/4 = 0.75
0	1
1	4/3 = $1.\overline{3}$
2	16/9 = 1.78



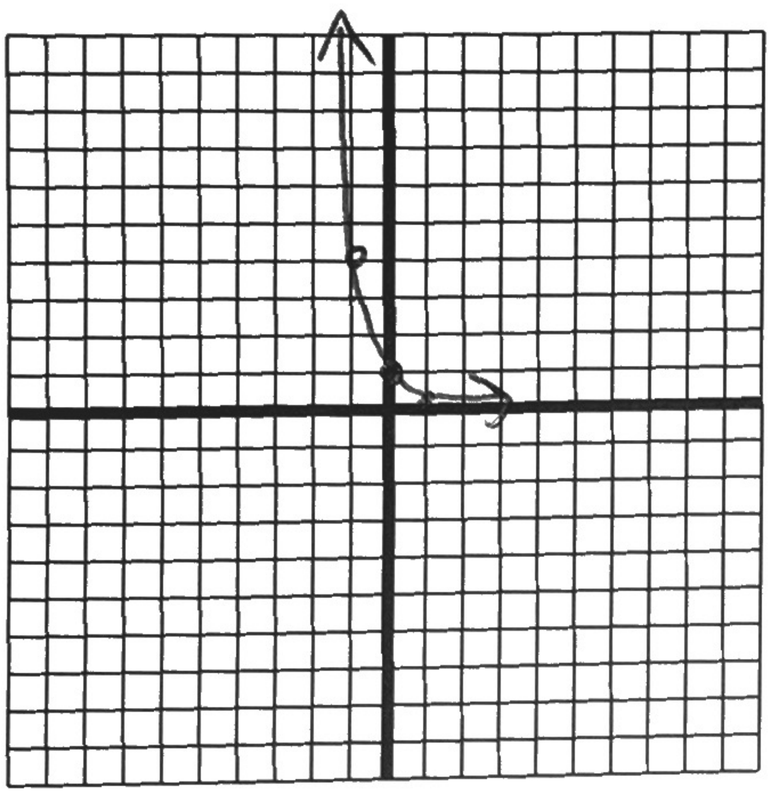
7. $f(x) = 0.25^x$

Growth or Decay?

Asymptote:

$y = 0$

x	y
-2	16
-1	4
0	1
1	0.25
2	0.0625



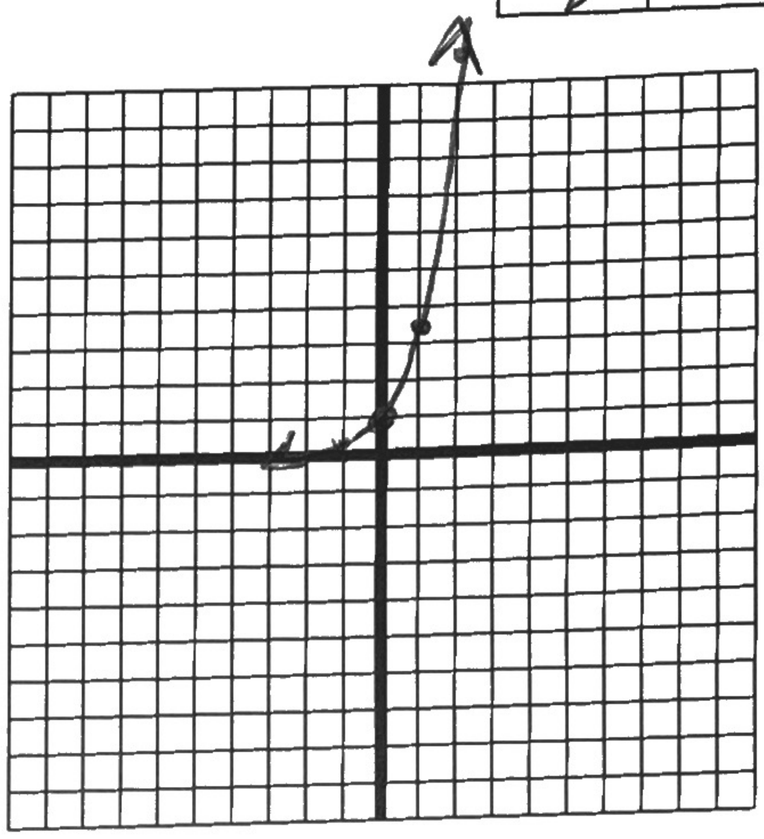
8. $f(x) = 3.3^x$

Growth or Decay?

Asymptote:

$y = 0$

x	y
-2	0.0992
-1	0.303
0	1
1	3.3
2	10.89



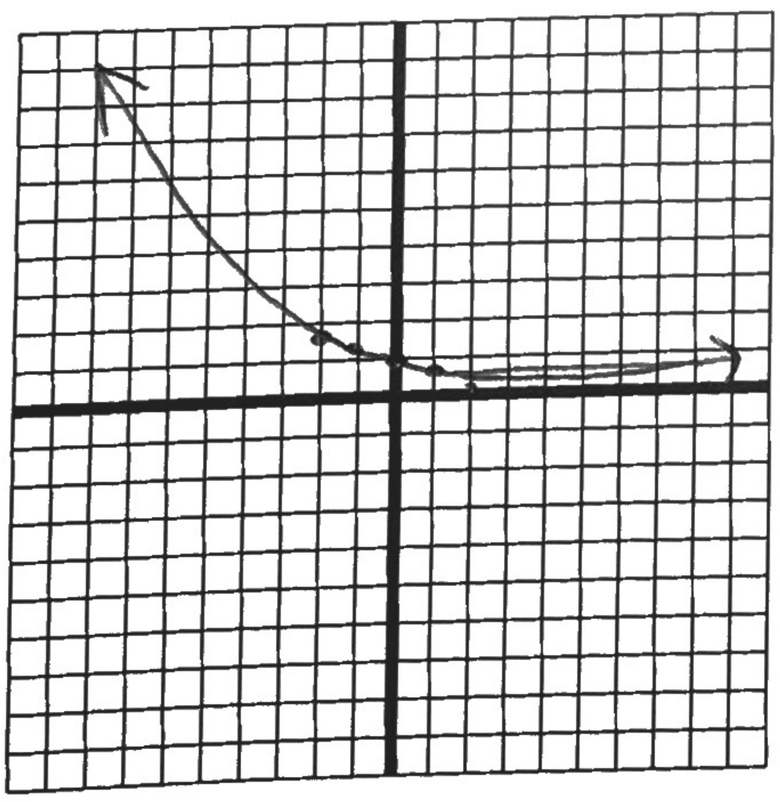
9. $f(x) = \left(\frac{3}{4}\right)^x$

Growth or Decay?

Asymptote:

$y = 0$

x	y
-2	16/9 = 1.778
-1	4/3 = 1.33
0	1
1	3/4 = 0.75
2	9/16 = 0.5625



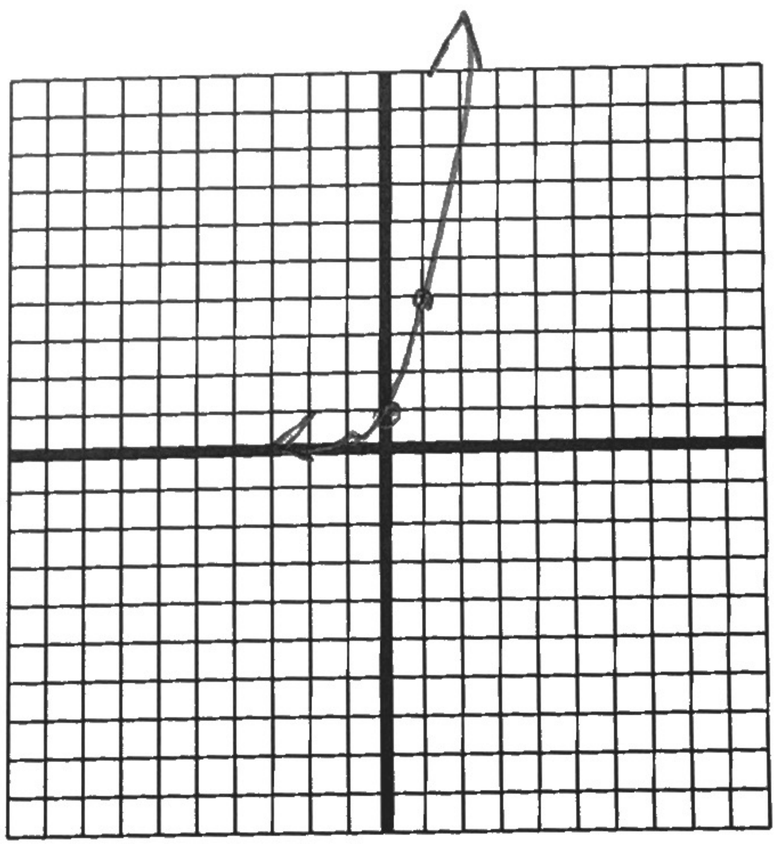
10. $f(x) = \left(\frac{8}{2}\right)^x$

Growth or Decay?

Asymptote:

$y = 0$

x	y
-2	0.0625
-1	0.25
0	1
1	4
2	16



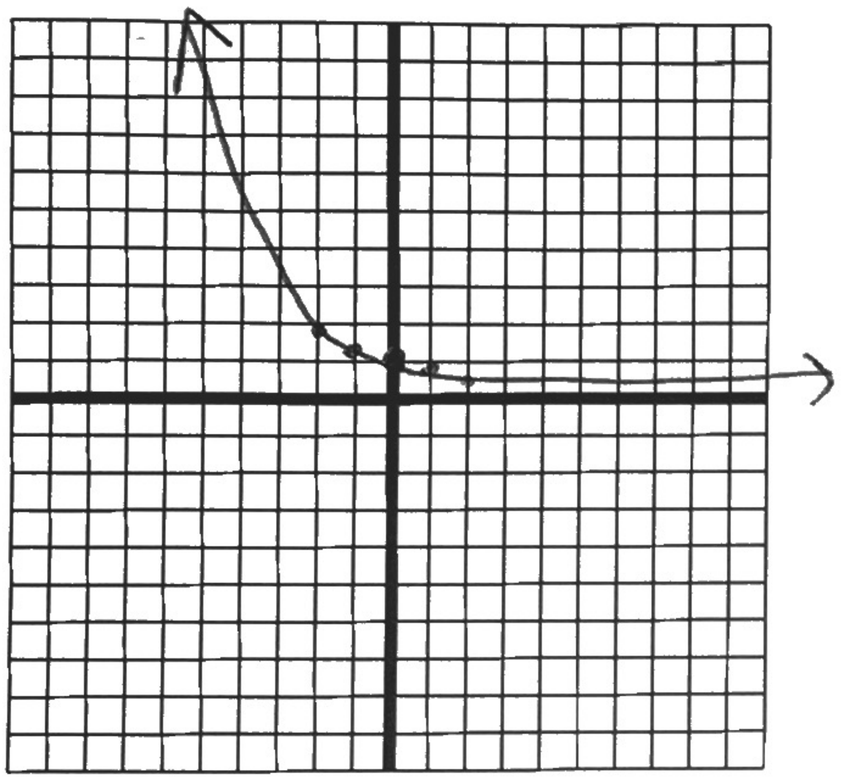
11. $f(x) = (0.75)^x$

Growth or Decay?

Asymptote:

$y = 0$

x	y
-2	1.778
-1	1.33
0	1
1	0.75
2	0.5625



12. $f(x) = \left(\frac{15}{2}\right)^x$

Growth or Decay?

Asymptote:

$y = 0$

x	y
-2	0.0178
-1	0.133
0	1
1	7.5
2	56.25