

- 1) Determine whether the following table of values corresponds to a linear or exponential function. Find the equation for the function.

$x$	1	2	3	4
$f(x)$	3.6	4.32	5.184	6.2208

- 2) GIVEN THE GRAPHS BELOW, MATCH EACH OF THE FOLLOWING TO ITS CORRESPONDING GRAPH.

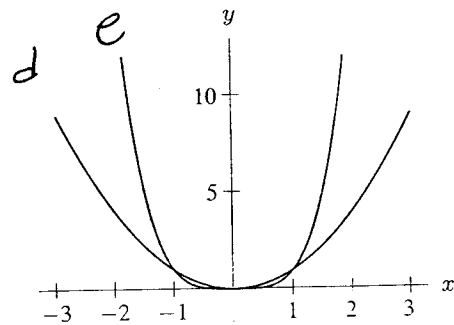
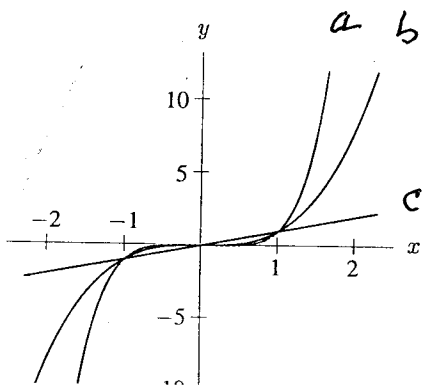
$$y = x$$

$$y = x^2$$

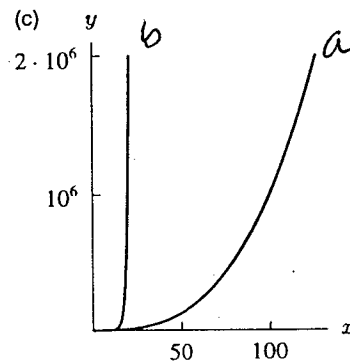
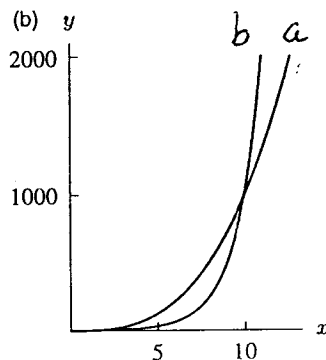
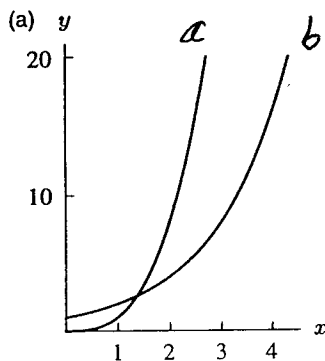
$$y = x^3$$

$$y = x^4$$

$$y = x^5$$



#3)



THE GRAPHS SHOW SEVERAL VIEWS OF  $y = 2^x$  AND  $y = x^3$ , USING THREE "WINDOWS". MATCH EACH WITH THE APPROPRIATE GRAPH. WHICH "DOMINATES" AS  $x$  GETS LARGE?

A population is currently 200 and is growing at 5% per year.

- Write a formula for the population,  $P$ , as a function of time,  $t$ , in years.
- Sketch a graph of  $P$  against  $t$ .
- Estimate the population 10 years from now.

USE FORM:  $P = P_0 a^t$