

2.4b Class Notes

There is a half page glue in that you will need to get from Mrs. Izatt.

2.4b Getting Down to Business

Learning Target:
Compare linear and exponential functions (in the long run)

Calcurama
In 2010, income of 5 million
Increases by .5 million per year (Add .5 million)

n	f(n)
2010 → 0	5
1	5.5
2	6
3	6.5
4	7
5	7.5

$$f(n) = .5n + 5$$

Computafest
In 2010, income of 2 million
Increases by 15% each year (Mult. by 1.15)
 $100\% + 15\% = 115\%$

n	g(n)
2010 → 0	2
1	2.3
2	2.645
3	3.042
4	3.498
5	4.023

$$g(n) = 2(1.15)^n$$

On the graphing calculator —

In the 12th year after 2010 (2022), Computafest and Calcurama will be the same with an income of 11.1. After that Computafest grows much faster.

When a linear and exponential function are both increasing then exponential will always end up growing faster in the long run.

Reflection: