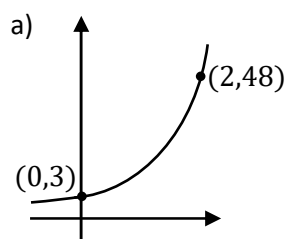




Name: _____

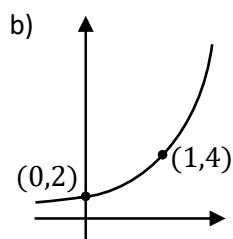


The graphs of $y = ka^x$ are plotted. Calculate the values of a and k to determine the graphs' equations:



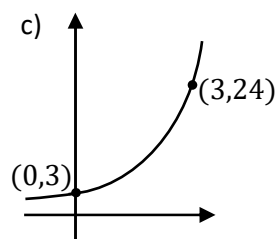
$$k = 3$$

$$a = 4$$



$$k = 2$$

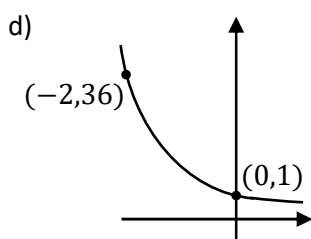
$$a = 2$$



$$k = 3$$

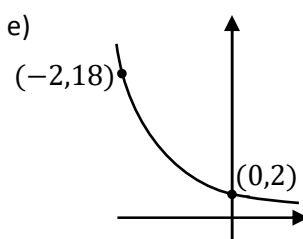
$$a = 2$$

The graphs of $y = ka^{-x}$ are plotted. Calculate the values of a and k to determine the graphs' equations:



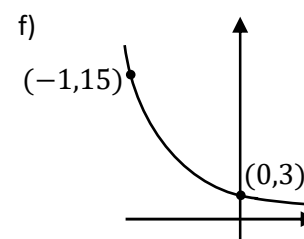
$$k = 1$$

$$a = 6$$



$$k = 2$$

$$a = 3$$



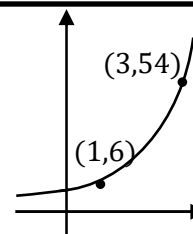
$$k = 3$$

$$a = 5$$

g) **Extension:** The graph of $y = ka^x$ is plotted.

Calculate the values of a and k to determine the graphs' equation:

$$k = 2 \quad a = 3$$



Exam question:

A sketch with equation $y = ab^x$ is shown, where a and b are constants and $b > 0$. The curve passes through the points $(0, 4)$ and $(3, 108)$. Calculate the value of a and b .

$$a = 4 \quad b = 3$$

