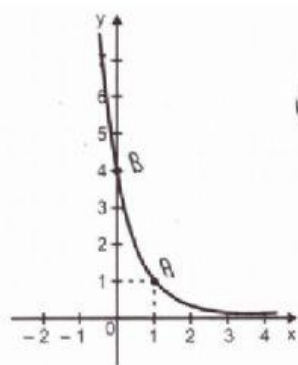


COLETÂNEA DE QUESTÕES DO PAEBES TRI

Descritor D25 – Corresponder uma função exponencial a seu gráfico

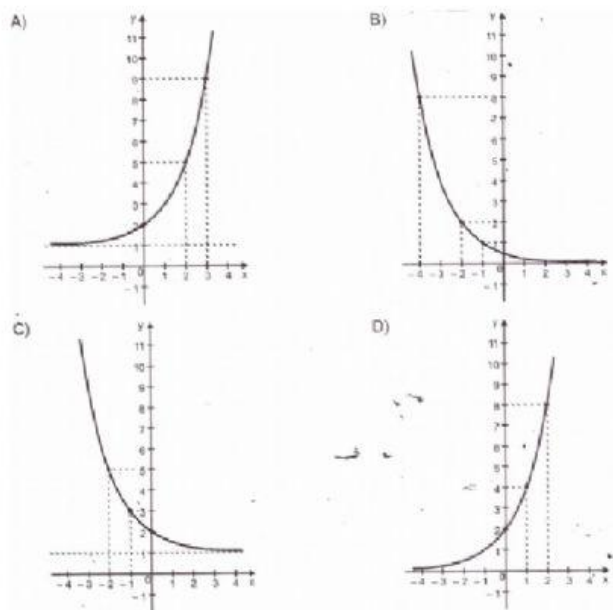
1. (PAEBES – 2015) Observe abaixo o gráfico de uma função $f: \mathbb{R}_+^* \rightarrow \mathbb{R}$.



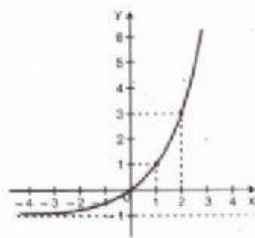
Qual é a lei de formação dessa função?

- a) $f(x) = 4^x$
- b) $f(x) = 4^{x-1}$
- c) $f(x) = \left(\frac{1}{4}\right)^x$
- d) $f(x) = \left(\frac{1}{4}\right)^x - 1$
- e) $f(x) = \left(\frac{1}{4}\right)^{x-1}$

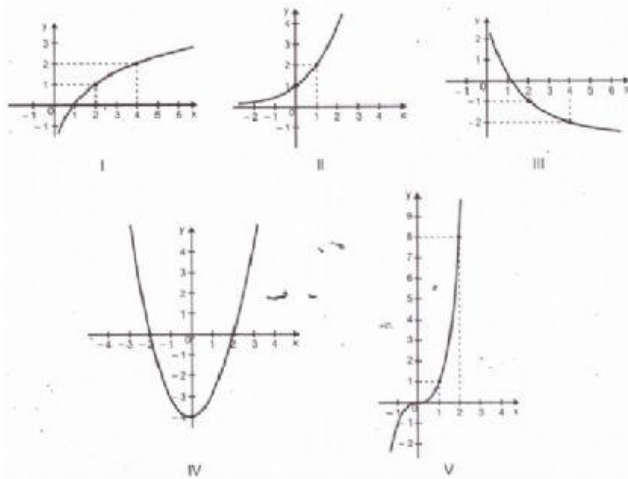
2. (PAEBES – 2015) O gráfico que melhor representa a função $y = 2^x + 1$, definida de $\mathbb{R}_+^*$ em $\mathbb{R}$, é:



E)



3. (PAEBES – 2015) Observe os gráficos de funções reais apresentados abaixo.



Qual desses gráficos corresponde à função $f(x) = 2^x$?

- a) I

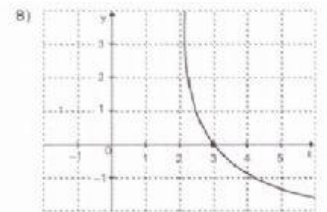
b) II

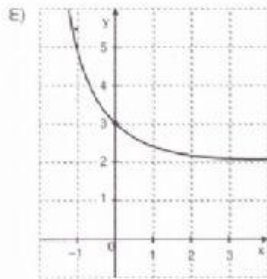
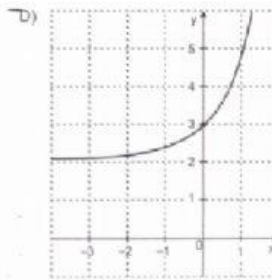
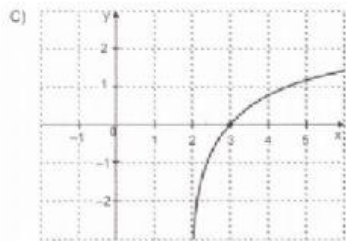
c) III

d) IV

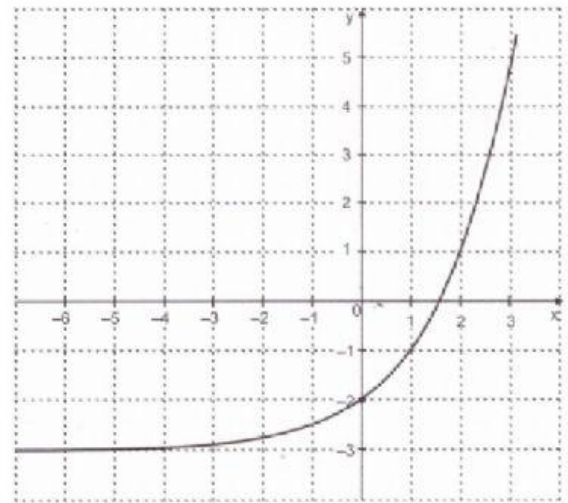
e) V

4. (PAEBES – 2016) Considere a função $f: \mathbb{R} \rightarrow \mathbb{R}_+^*$ definida por $f(x) = 3^x + 2$. Qual é o gráfico que representa essa função?





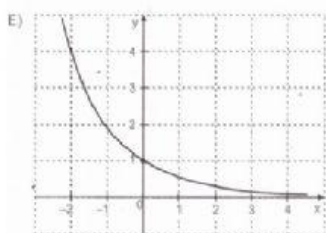
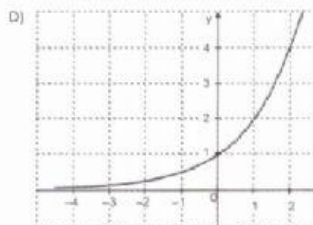
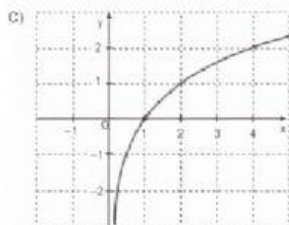
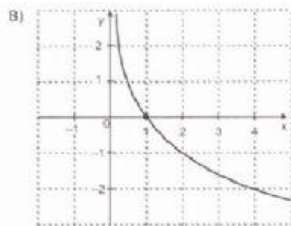
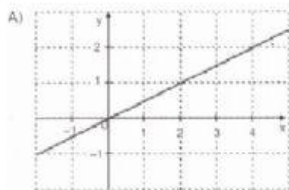
5. (PAEBES – 2016) Considere a função $f: \mathbb{R} \rightarrow]-3, +\infty[$ cujo gráfico é dado a seguir.



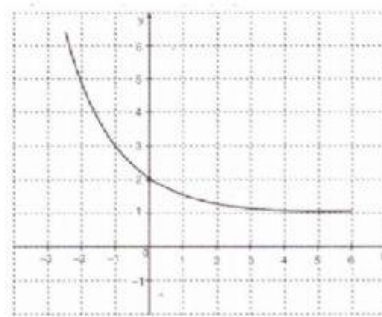
A lei que define essa função é dada por:

- a) $f(x) = x$
- b) $f(x) = 1 + (3 - x)$
- c) $f(x) = 3^x - 8$
- d) $f(x) = 3^x - 3$
- e) $f(x) = 2^x - 3$

6. (PAEBES – 2016) Considere a função $f: \mathbb{R} \rightarrow \mathbb{R}_+$ definida por $f(x) = \left(\frac{1}{2}\right)^x$. O gráfico que representa essa função é:



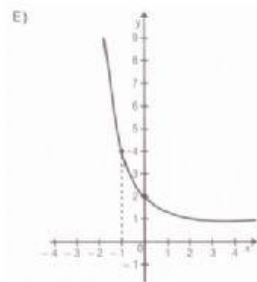
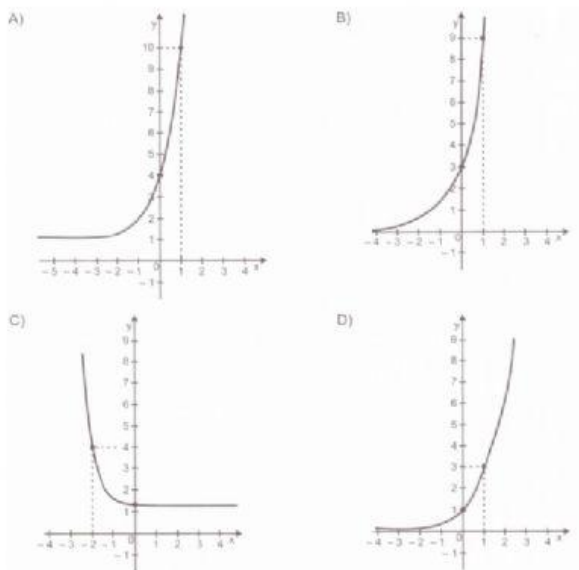
7. (PAEBES – 2016) Considere a função $f: \mathbb{R} \rightarrow]1, +\infty[$ cujo gráfico é dado a seguir.



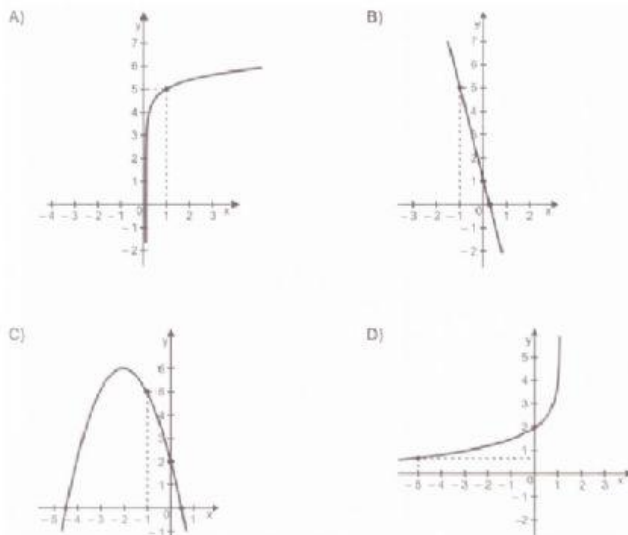
A lei que define essa função é dada por:

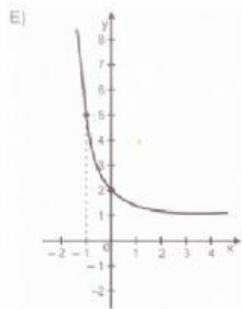
- a) $f(x) = x$
- b) $f(x) = 1 + x$
- c) $f(x) = -\frac{3}{2}x + 2$
- d) $f(x) = \left(\frac{1}{2}\right)^x + 1$
- e) $f(x) = \left(\frac{1}{2}\right)^{x+1}$

8. (PAEBES – 2017) Considere a função $f: \mathbb{R} \rightarrow \mathbb{R}$, definida por $f(x) = 3^{x+1} + 1$. Um esboço do gráfico dessa função está representado em:

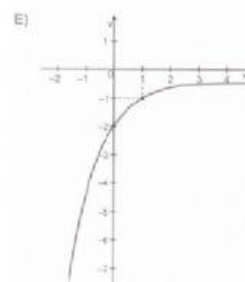
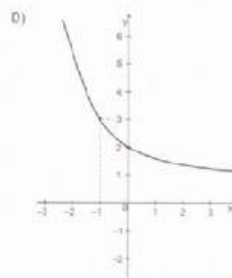
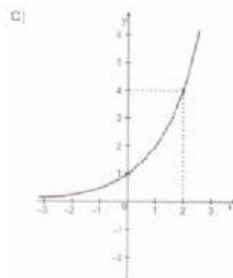
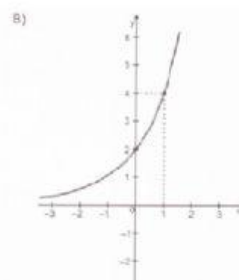
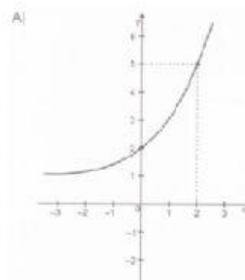


9. (PAEBES – 2017) Considere a função $f: \mathbb{R} \rightarrow \mathbb{R}$ definida por $f(x) = 4^{-x} + 1$. Um esboço do gráfico dessa função está representado em:





10. (PAEBES – 2017) Considere a função $f: \mathbb{R} \rightarrow \mathbb{R}$ definida por $f(x) = 2^x + 1$. Um esboço do gráfico dessa função está representado em:

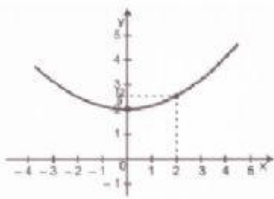


11. (PAEBES – 2018) Considere a função $f: \mathbb{R} \rightarrow \mathbb{R}$ definida por

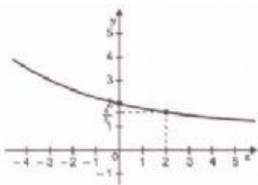
$$f(x) = \left(\frac{3}{5}\right)^{\frac{1}{2}x} + 1.$$

Um esboço do gráfico dessa função está representado em:

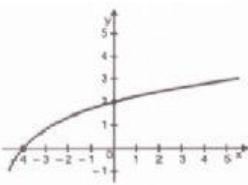
A)



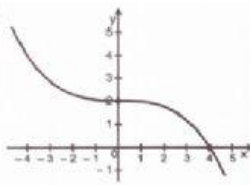
B)



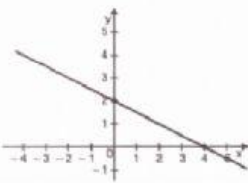
C)



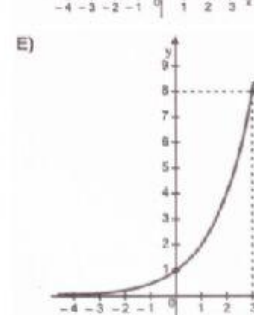
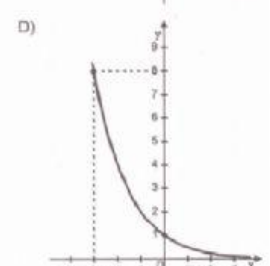
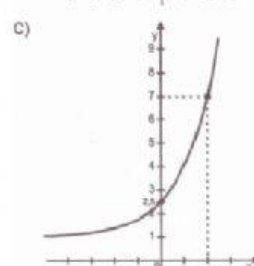
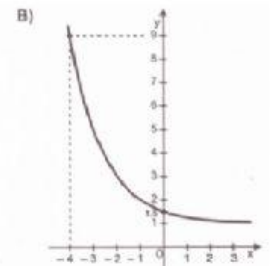
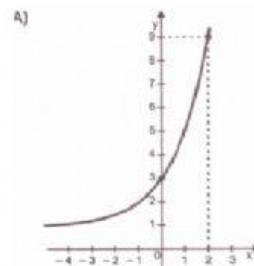
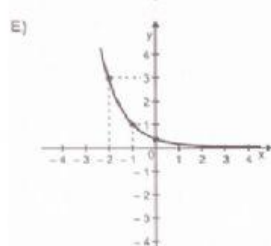
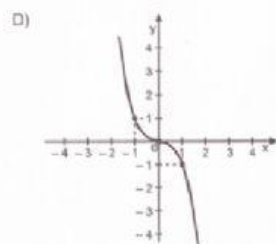
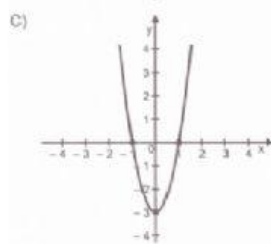
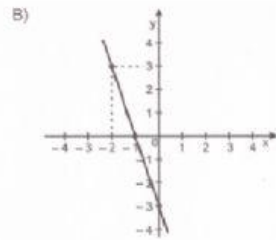
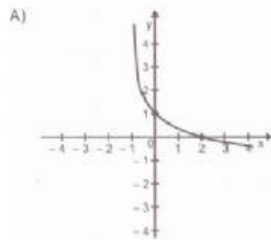
D)



E)

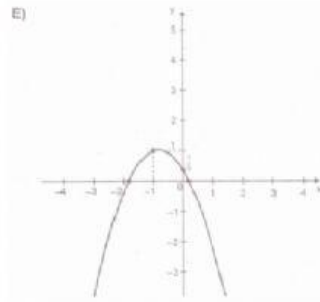
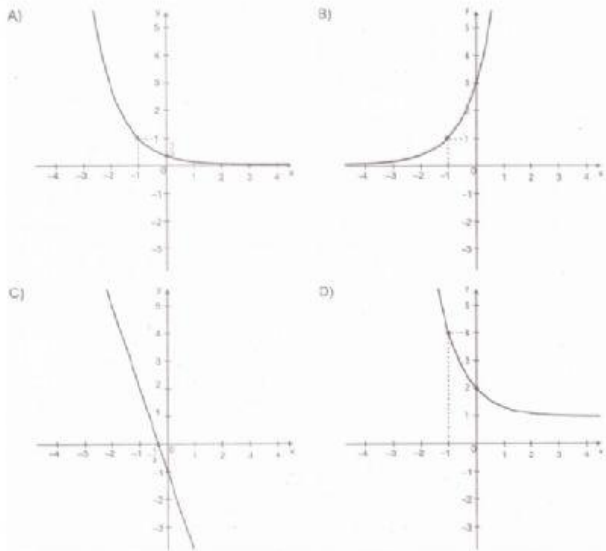


12. (PAEBES – 2018) Considere a função $f: \mathbb{R} \rightarrow \mathbb{R}$ definida por $f(x) = 3^{-x-1}$. Um esboço do gráfico dessa função está representado em:



13. (PAEBES – 2018) Considere a função $f: \mathbb{R} \rightarrow \mathbb{R}$ definida por $f(x) = 2^{x+1} + 1$. Um esboço do gráfico dessa função está representado em:

14. (PAEBES – 2019) Considere a função $f: \mathbb{R} \rightarrow \mathbb{R}$ definida por $f(x) = \left(\frac{1}{3}\right)^{(x+1)}$. O gráfico dessa função está representado em:



15. (PAEBES – 2019) Considere a função $f: \mathbb{R} \rightarrow \mathbb{R}$ definida por $f(x) = \left(\frac{1}{2}\right)^x - \frac{1}{4}$. O gráfico dessa função f está representado em: