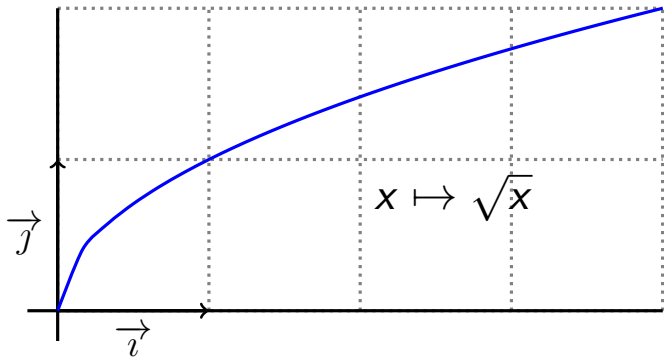


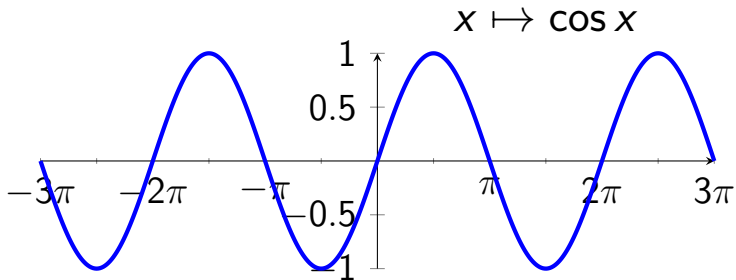
$$\sqrt{9} = 3$$

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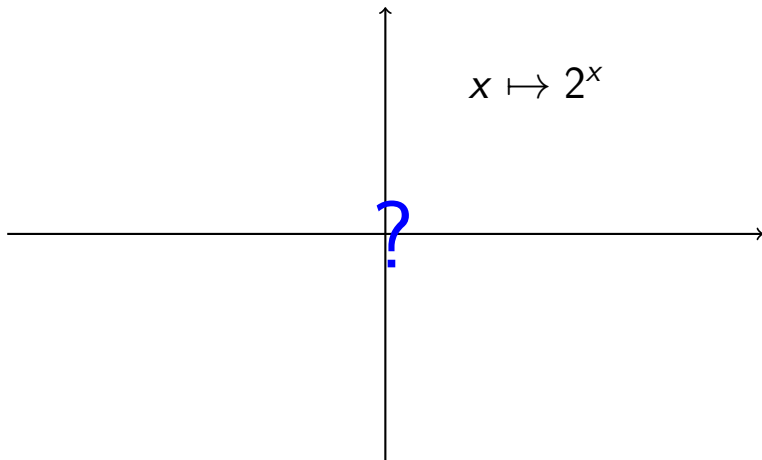
$$\cos \frac{\pi}{4} = \frac{\sqrt{2}}{2}$$

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$$2^5 = 2 \times 2 \times 2 \times 2 \times 2 = 32$$

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Traçons la courbe de la fonction définie sur \mathbb{R} par

$$f(x) = e^x$$

(où $e \approx 2,71828 \dots$).

▶ $f(0) = e^0 = 1$

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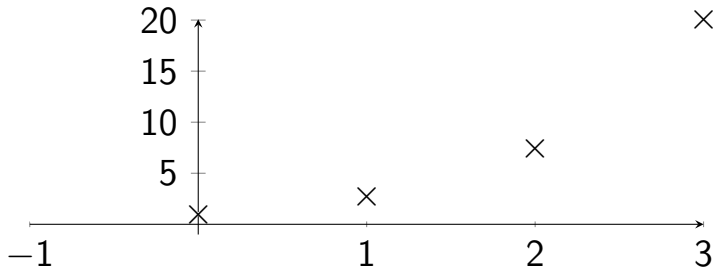
▶ $f(1) = e^1 = e \approx 2,71828$

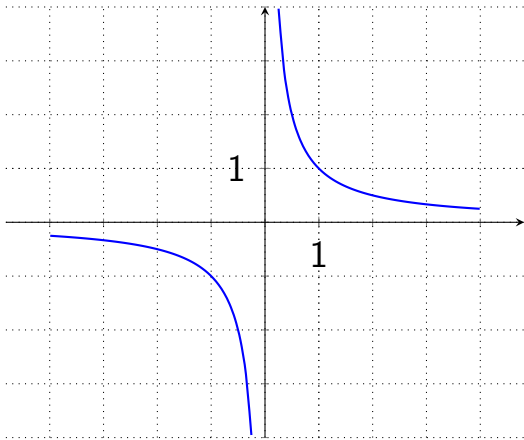
▶ $f(0) = e^0 = 1$

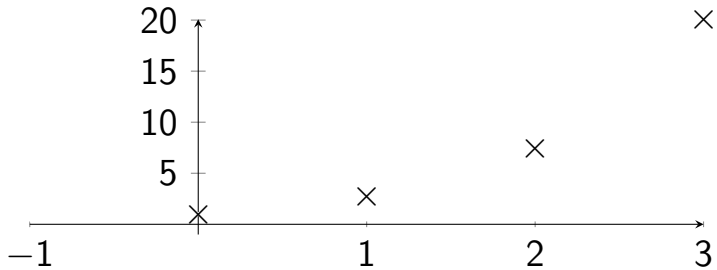
▶ $f(1) = e^1 = e \approx 2,71828$

▶ $f(2) = e^2 = e \times e \approx 7,3$

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- ▶ $f(1) = e^1 = e \approx 2,71828$
- ▶ $f(2) = e^2 = e \times e \approx 7,3$
- ▶ $f(3) = e^3 = e \times e \times e \approx 20,1$







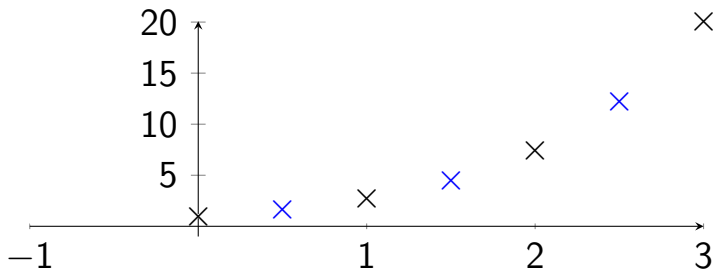
▶ $\sqrt{9} = 9^{1/2} = 9^{0,5}$

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▶ $f(0,5) = e^{0,5} = \sqrt{e} \approx 1,6$

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- ▶ $f(1, 5) = e^{1,5} = e^1 \times e^{0,5} \approx 4, 5$
- ▶ $f(2, 5) = e^{2,5} = e^2 \times e^{0,5} \approx 12, 2$



► $\sqrt[3]{8} = ?$ est le nombre tel que $?^3 = 8$

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- ▶ $f(2/3) = e^{2/3} = e^{1/3} \times e^{1/3} \approx 1,9$
- ▶ $f(1 + 1/3) = e^1 \times e^{1/3} = e \times e^{1/3} \approx 3,8$

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- ▶ $f(2 + 1/3) = e^2 \times e^{1/3} \approx 10,3$

- ▶ $\sqrt[3]{8} = ?$ est le nombre tel que $?^3 = 8$
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- ▶ $f(2/3) = e^{2/3} = e^{1/3} \times e^{1/3} \approx 1,9$
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- ▶ $f(2 + 2/3) = e^2 \times e^{2/3} \approx 14,4$

