Racines

$$\boxed{a^{\frac{p}{q}} = \sqrt[q]{a^p}}$$

a un nombre

$$\boxed{a > 0}$$

$$3^{\frac{4}{5}} = \sqrt[5]{3^4}$$

$$= 3^{0,8}$$

$$a^n \cdot a^m = a^{n+m}$$

$$\boxed{a^{\frac{1}{2}} \cdot a^{\frac{4}{3}}} = a^{\frac{1}{2} + \frac{4}{3}} \qquad \frac{1}{2} + \frac{4}{3} = \frac{3+8}{6} = \frac{11}{6}$$

$$= a^{\frac{11}{6}}$$

$4 = 2^2$

$(4^2)^4 = 4^{2 \cdot 4} = 4^8$

$= (2^2)^8$

$(2^n)^m = 2^{n \cdot m}$

$= 2^{16}$

$= 16^4$

$$a^m a^n = a^{m+n}$$

$$a^{\frac{1}{3}} = \sqrt[3]{a}$$

$$\sqrt[4]{5} = 5^{\frac{1}{4}}$$

$$6^{\frac{1}{2}} \cdot 6^{-1} = 6^{\frac{1}{2}-1} = 6^{-\frac{1}{2}} = \frac{1}{6^{\frac{1}{2}}} = \frac{1}{\sqrt[2]{6}}$$

$$\sqrt[2]{\sqrt[2]{2}} = \left(2^{\frac{1}{2}}\right)^{\frac{1}{2}} = 2^{\frac{1}{4}} = \sqrt[4]{2}$$

$$\frac{\sqrt{a}}{a} = \frac{a^{\frac{1}{2}}}{a^1} = a^{\frac{1}{2}-1} = a^{-\frac{1}{2}} = \frac{1}{\sqrt{a}}$$

$$\boxed{a^{\frac{p}{q}} = \sqrt[q]{a^p}}$$

$$a^{\frac{1}{2}} = \sqrt[2]{a^1} = \sqrt{a}$$

$$4^{\frac{1}{5}} = \sqrt[5]{4^1}$$

$$a^{-n} = \frac{1}{a^n}$$

$$6^{\frac{2}{3}} = \sqrt[3]{6^2}$$

$$\sqrt{a} = a^{\frac{1}{2}}$$

$$a = a^1$$

$$\sqrt{\sqrt{2}} = \sqrt{2^{\frac{1}{2}}} = \left(2^{\frac{1}{2}}\right)^{\frac{1}{2}} = 2^{\frac{1}{4}} = \sqrt[4]{2}$$

$$\frac{a^m}{a^n} = a^{m-n}$$

$$\sqrt{x} = x^{\frac{1}{2}} \qquad \sqrt[n]{x} = x^{\frac{1}{n}}$$

$$\sqrt[3]{\sqrt[2]{7}} = \left(7^{\frac{1}{2}}\right)^{\frac{1}{3}} = 7^{\frac{1}{6}} = \sqrt[6]{7}$$

$\boxed{\text{Analyse}}$ (Fonctions)

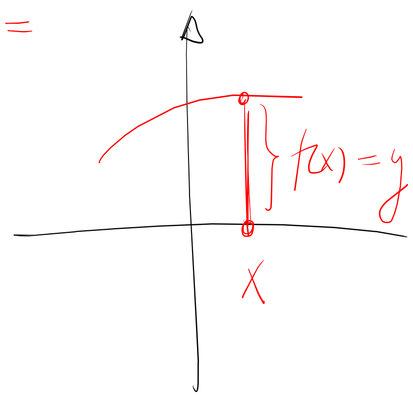
Chap 1 / p. 28

4 $D_f =]-12\,;\,10]$

6 (1) à 6))

8

$Im\, f =$



$f(5) = 12$

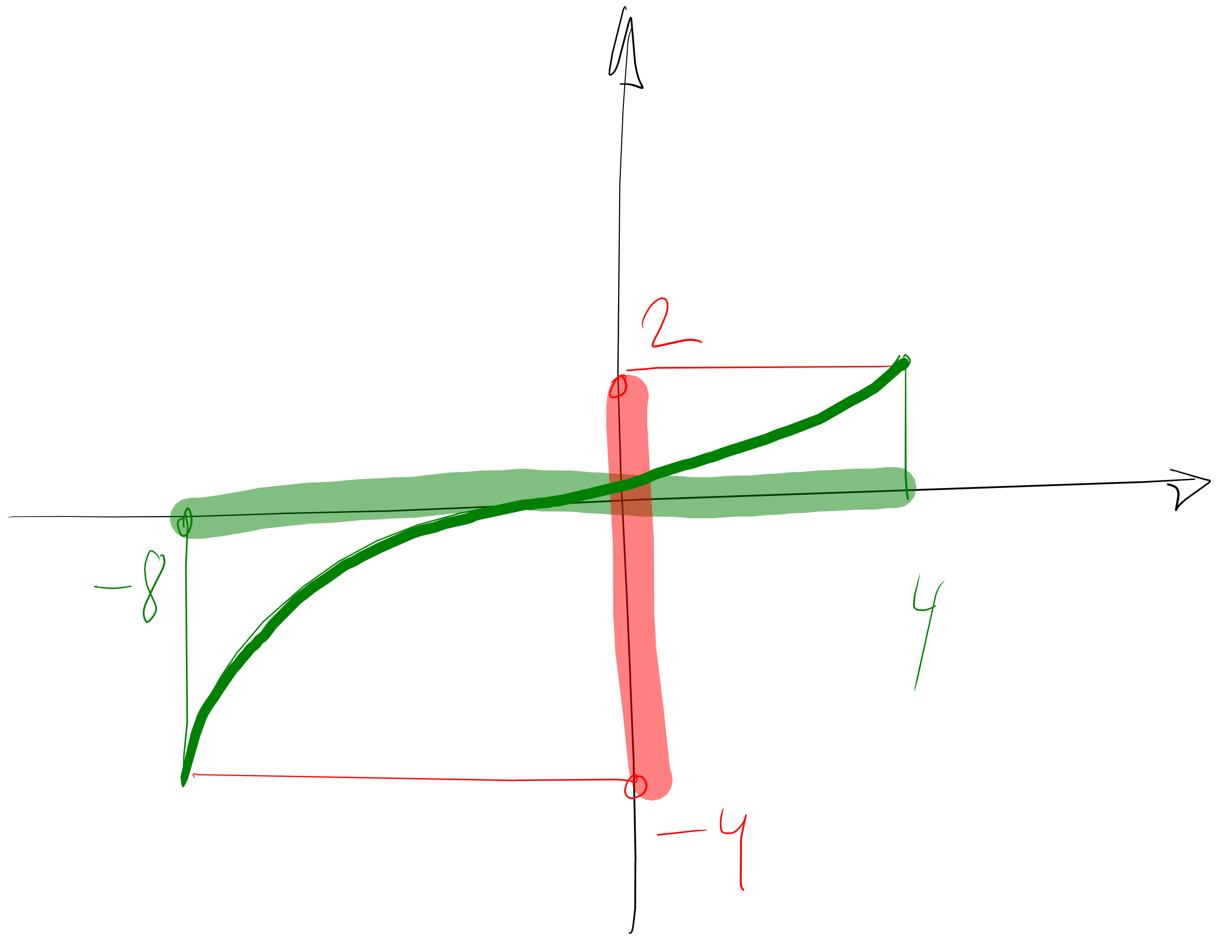
valeur x

image y

12 est l'image de 5 par f

5 est la préimage de 12 par f

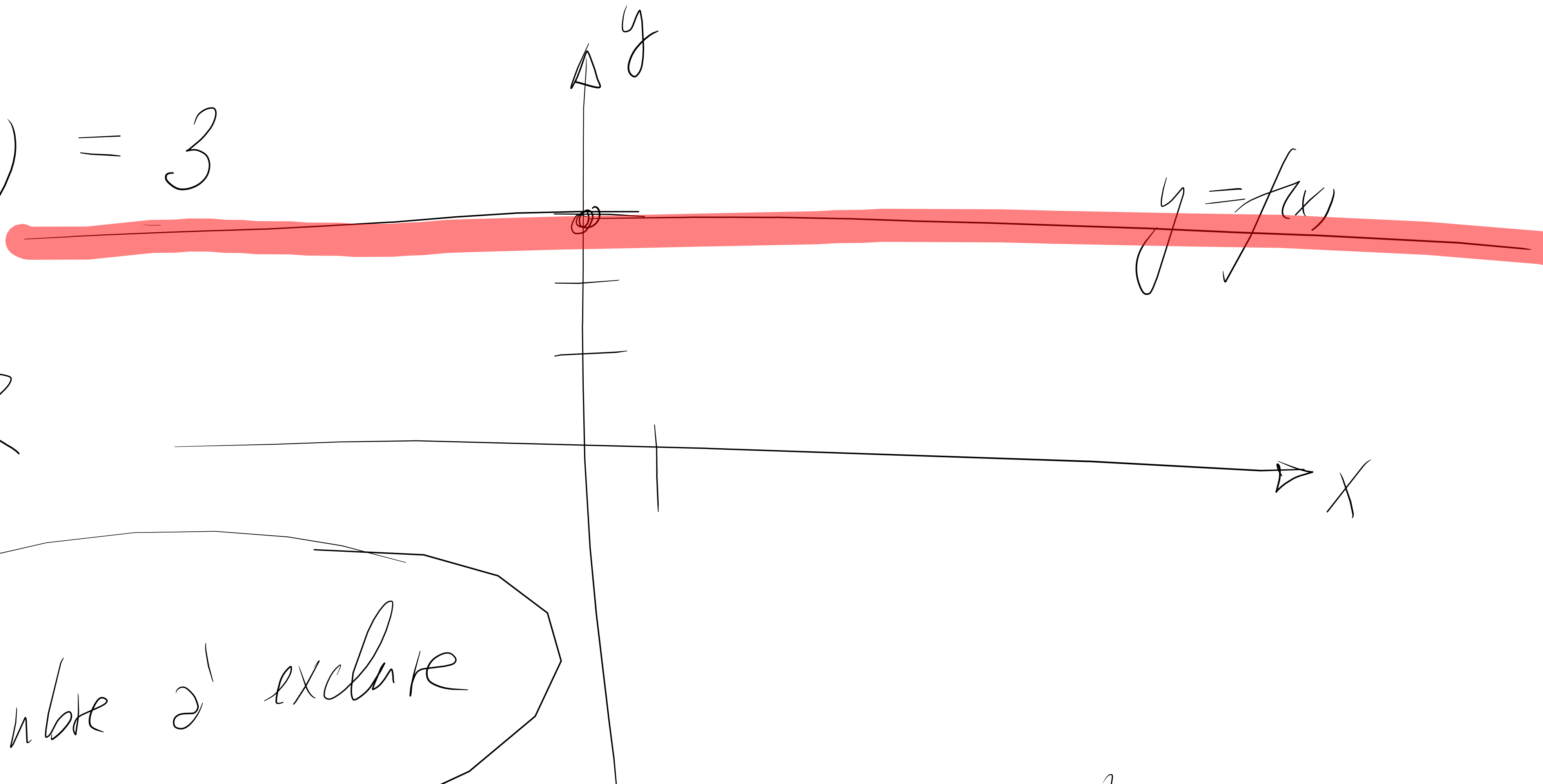
$f(x) = y$



$D_f = [-8; 4]$

$\operatorname{Im} f = [-4; 2]$

$f(x) = 3$



$D_f = \mathbb{R}$

Pas de nbre d' exclure

$Im_f = \{3\}$

$\frac{1}{x}$ $\sqrt{x}$

$$f(x) = -\frac{1}{2}x + 2$$