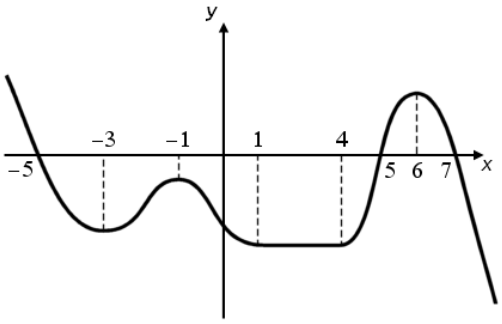
LISTA DE EXERCÍCIOS DE AULA

Número da aula: **2**
Módulo: ..... **n** – Nivelamento
Atividade: ..... **2** – Nivelamento – Gráficos

01. Determine os intervalos de valores de x em que cada uma das funções $y = f(x)$ representadas pelos gráficos a seguir:

- é crescente, decrescente ou constante;
- assume valores positivos, negativos ou vale zero;

a)



$f(x)$ crescente →

$f(x)$ decrescente →

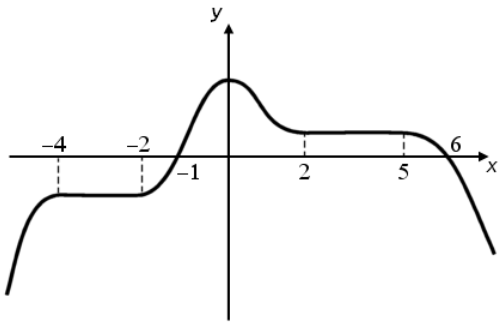
$f(x)$ constante →

$f(x) > 0$ →

$f(x) < 0$ →

$f(x) = 0$ →

b)



$f(x)$ crescente →

$f(x)$ decrescente →

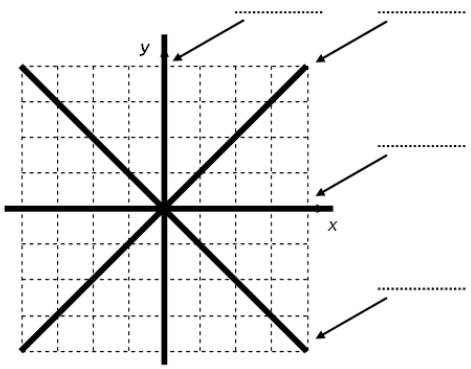
$f(x)$ constante →

$f(x) > 0$ →

$f(x) < 0$ →

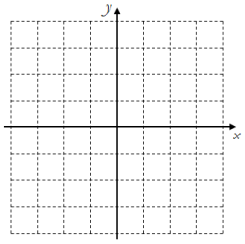
$f(x) = 0$ →

02. Preencha as lacunas abaixo com as equações das retas indicadas.

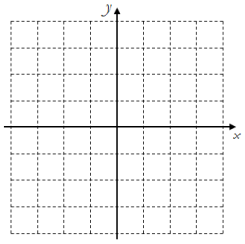


03. Trace esboços dos gráficos abaixo, identificando as famílias a que cada um pertence e descrevendo sua principal característica comum.

$y = 2$



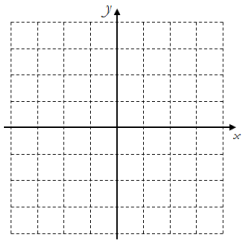
$y = -3$



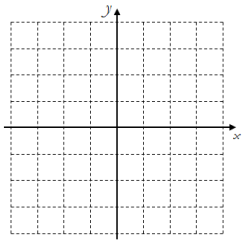
Família de Gráficos:

Característica Comum:

$x = 3$



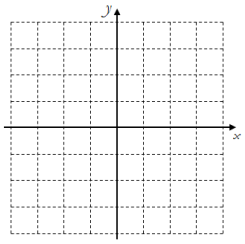
$x = -2$



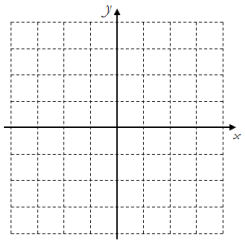
Família de Gráficos:

Característica Comum:

$y = x^2$



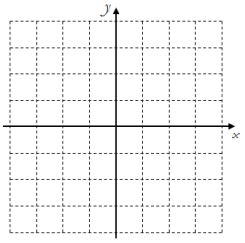
$y = x^4$



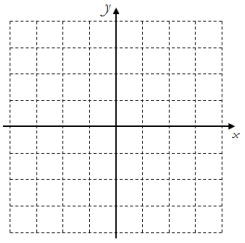
Família de Gráficos:

Característica Comum:

$y = x^3$



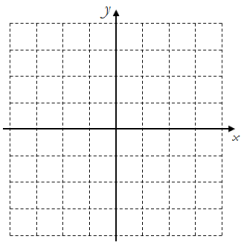
$y = x^5$



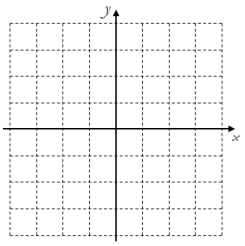
Família de Gráficos:

Característica Comum:

$y = \sqrt{x}$



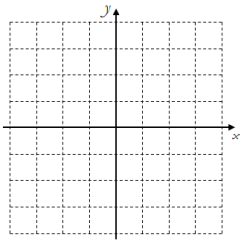
$y = \sqrt[4]{x}$



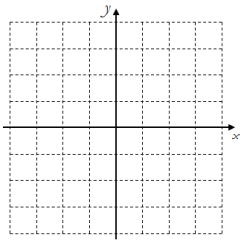
Família de Gráficos:

Característica Comum:

$y = \sqrt[3]{x}$



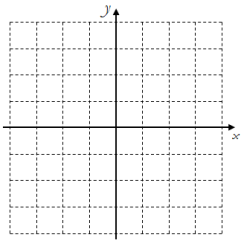
$y = \sqrt[5]{x}$



Família de Gráficos:

Característica Comum:

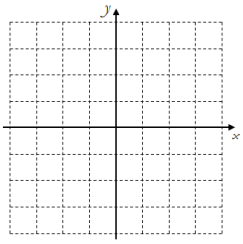
$y = |x|$



Família de Gráficos:

Característica Comum:

$y = \dfrac{1}{x}$

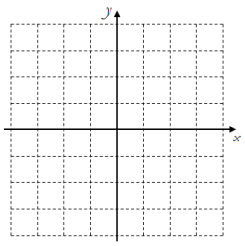


Família de Gráficos:

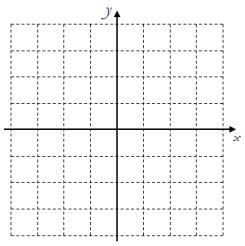
Característica Comum:

04. Trace esboços dos gráficos abaixo considerando as transformações sugeridas e expressando por extenso suas consequências.

$y = x^2$

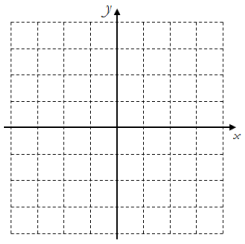


$y = x^2 + 2$

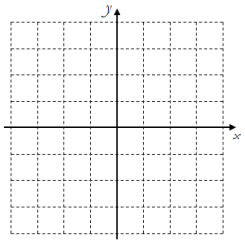


Consequência da Transformação:

$y = \sqrt{x}$

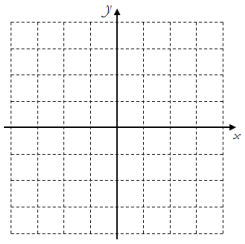


$y = \sqrt{x+3}$

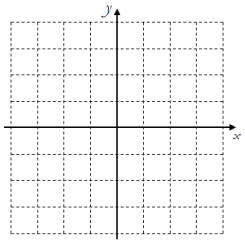


Consequência da Transformação:

$y = x^3$

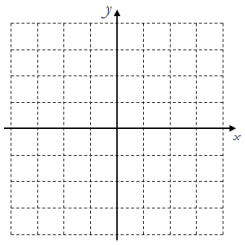


$y = -x^3$

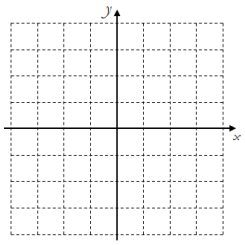


Consequência da Transformação:

$y = \sqrt[3]{x}$



$y = \sqrt[3]{-x}$



Consequência da Transformação: