

**LISTA BÁSICA – 2º ANO – DETERMINANTES**

**01.** Calcule os determinantes.

A)  $\begin{vmatrix} 3 & 4 \\ 1 & -2 \end{vmatrix}$

D)  $\begin{vmatrix} a & -a \\ -a & -a \end{vmatrix}$

B)  $\begin{vmatrix} 0 & 1 \\ -3 & 2 \end{vmatrix}$

E)  $\begin{vmatrix} \operatorname{sen} x & \operatorname{cos} x \\ -\operatorname{cos} x & \operatorname{sen} x \end{vmatrix}$

C)  $\begin{vmatrix} 1 & -1 \\ 2 & 2 \end{vmatrix}$

F)  $\begin{vmatrix} 2\operatorname{sen} x & 4\operatorname{cos} x \\ 3\operatorname{cos} x & -6\operatorname{sen} x \end{vmatrix}$

**02.** Calcule  $x$  nas igualdades.

A)  $\begin{vmatrix} x & 2 \\ -3 & 2 \end{vmatrix} = 10$

D)  $\begin{vmatrix} x & -8 \\ -3 & 5x \end{vmatrix} = 21$

B)  $\begin{vmatrix} 2x & -4 \\ -3 & 2 \end{vmatrix} = 8$

E)  $\begin{vmatrix} x^2 & 8 \\ -2 & -x \end{vmatrix} = -11$

C)  $\begin{vmatrix} x & 5 \\ x & x \end{vmatrix} = -6$

F)  $\begin{vmatrix} x & -1 \\ 2x & x \end{vmatrix} = 3$

**03.** Calcule os determinantes.

A)  $\begin{vmatrix} 3 & 4 & 0 \\ -2 & 0 & 2 \\ 1 & -2 & 1 \end{vmatrix}$

B)  $\begin{vmatrix} 1 & -1 & 2 \\ 5 & 7 & -4 \\ 1 & 0 & 1 \end{vmatrix}$

C)  $\begin{vmatrix} 0 & 1 & 3 \\ -3 & 0 & 1 \\ 4 & 2 & 5 \end{vmatrix}$

D)  $\begin{vmatrix} 1 & 0 & 4 \\ 0 & 2 & 1 \\ 0 & 0 & -6 \end{vmatrix}$

E)  $\begin{vmatrix} 0 & 1 & 3 & 1 \\ -3 & 0 & 1 & 5 \\ 4 & 3 & 4 & 5 \\ 4 & 2 & 5 & 4 \end{vmatrix}$

F)  $\begin{vmatrix} 1 & 0 & 3 & 2 \\ -3 & 0 & 1 & 1 \\ 1 & 0 & 3 & -1 \\ 0 & 3 & -2 & 2 \end{vmatrix}$

**04.** Resolva as equações:

A)  $\begin{vmatrix} 0 & 2 & 1 \\ -4 & -1 & x \\ 2 & -1 & 1 \end{vmatrix} = 9$

B)  $\begin{vmatrix} 1 & 0 & 3 \\ 3 & 2 & 0 \\ y & 0 & 0 \end{vmatrix} = \begin{vmatrix} 5 & y \\ 2 & -4 \end{vmatrix}$

C)  $\begin{vmatrix} 1 & 2 & 3 & -x \\ 1 & 0 & 2 & 3 \\ 0 & 1 & 2 & 3 \\ 2 & 1 & x+4 & 1 \end{vmatrix} = \begin{vmatrix} 4 & 2 & 1 \\ 5 & x & 3 \\ 2 & -x & 0 \end{vmatrix}$

**LISTA BÁSICA – 2º ANO – DETERMINANTES**

**01.** Calcule os determinantes.

A)  $\begin{vmatrix} 3 & 4 \\ 1 & -2 \end{vmatrix}$

D)  $\begin{vmatrix} a & -a \\ -a & -a \end{vmatrix}$

B)  $\begin{vmatrix} 0 & 1 \\ -3 & 2 \end{vmatrix}$

E)  $\begin{vmatrix} \operatorname{sen} x & \operatorname{cos} x \\ -\operatorname{cos} x & \operatorname{sen} x \end{vmatrix}$

C)  $\begin{vmatrix} 1 & -1 \\ 2 & 2 \end{vmatrix}$

F)  $\begin{vmatrix} 2\operatorname{sen} x & 4\operatorname{cos} x \\ 3\operatorname{cos} x & -6\operatorname{sen} x \end{vmatrix}$

**02.** Calcule  $x$  nas igualdades.

A)  $\begin{vmatrix} x & 2 \\ -3 & 2 \end{vmatrix} = 10$

D)  $\begin{vmatrix} x & -8 \\ -3 & 5x \end{vmatrix} = 21$

B)  $\begin{vmatrix} 2x & -4 \\ -3 & 2 \end{vmatrix} = 8$

E)  $\begin{vmatrix} x^2 & 8 \\ -2 & -x \end{vmatrix} = -11$

C)  $\begin{vmatrix} x & 5 \\ x & x \end{vmatrix} = -6$

F)  $\begin{vmatrix} x & -1 \\ 2x & x \end{vmatrix} = 3$

**03.** Calcule os determinantes.

A)  $\begin{vmatrix} 3 & 4 & 0 \\ -2 & 0 & 2 \\ 1 & -2 & 1 \end{vmatrix}$

B)  $\begin{vmatrix} 1 & -1 & 2 \\ 5 & 7 & -4 \\ 1 & 0 & 1 \end{vmatrix}$

C)  $\begin{vmatrix} 0 & 1 & 3 \\ -3 & 0 & 1 \\ 4 & 2 & 5 \end{vmatrix}$

D)  $\begin{vmatrix} 1 & 0 & 4 \\ 0 & 2 & 1 \\ 0 & 0 & -6 \end{vmatrix}$

E)  $\begin{vmatrix} 0 & 1 & 3 & 1 \\ -3 & 0 & 1 & 5 \\ 4 & 3 & 4 & 5 \\ 4 & 2 & 5 & 4 \end{vmatrix}$

F)  $\begin{vmatrix} 1 & 0 & 3 & 2 \\ -3 & 0 & 1 & 1 \\ 1 & 0 & 3 & -1 \\ 0 & 3 & -2 & 2 \end{vmatrix}$

**04.** Resolva as equações:

A)  $\begin{vmatrix} 0 & 2 & 1 \\ -4 & -1 & x \\ 2 & -1 & 1 \end{vmatrix} = 9$

B)  $\begin{vmatrix} 1 & 0 & 3 \\ 3 & 2 & 0 \\ y & 0 & 0 \end{vmatrix} = \begin{vmatrix} 5 & y \\ 2 & -4 \end{vmatrix}$

C)  $\begin{vmatrix} 1 & 2 & 3 & -x \\ 1 & 0 & 2 & 3 \\ 0 & 1 & 2 & 3 \\ 2 & 1 & x+4 & 1 \end{vmatrix} = \begin{vmatrix} 4 & 2 & 1 \\ 5 & x & 3 \\ 2 & -x & 0 \end{vmatrix}$