Dados dois conjuntos $\{x_1, x_2\}$ e $\{w_1, w_2, w_3\}$, encontrar todas as combinações de elementos de cada.

In[1]:=
```
Tuples@{{x1, x2}, {w1, w2, w3}}
```

Out[1]=
```
{{x1, w1}, {x1, w2}, {x1, w3}, {x2, w1}, {x2, w2}, {x2, w3}}
```

In[2]:=
```
{{{x1, w1}, {x1, w2}, {x1, w3}}, {{x2, w1}, {x2, w2}, {x2, w3}}}
```

Out[2]=
```
{{{x1, w1}, {x1, w2}, {x1, w3}}, {{x2, w1}, {x2, w2}, {x2, w3}}}
```

In[3]:=
```
Transpose@{{{x1, w1}, {x1, w2}, {x1, w3}}, {{x2, w1}, {x2, w2}, {x2, w3}}} // MatrixForm
```

Out[3]//MatrixForm=

$$\begin{pmatrix} \begin{pmatrix} x_1 \\ w_1 \end{pmatrix} & \begin{pmatrix} x_2 \\ w_1 \end{pmatrix} \\ \begin{pmatrix} x_1 \\ w_2 \end{pmatrix} & \begin{pmatrix} x_2 \\ w_2 \end{pmatrix} \\ \begin{pmatrix} x_1 \\ w_3 \end{pmatrix} & \begin{pmatrix} x_2 \\ w_3 \end{pmatrix} \end{pmatrix}$$