

Warm-up: Review Test

1. Solve for a: $a \begin{bmatrix} 10 & -2 \\ -1 & 4 \end{bmatrix} = \begin{bmatrix} 5 & -1 \\ -\frac{1}{2} & 2 \end{bmatrix}$ $\frac{a \cdot 10}{10} = \frac{5}{10}$
 $a = \frac{1}{2}$

2. Solve for x: $\begin{vmatrix} 3 & x \\ x & 2 \end{vmatrix} = 5x$ $6 - x^2 = 5x$
 $-x^2 - 5x + 6 = 0$
 $x^2 + 5x - 6 = 0$
 $(x + 6)(x - 1) = 0$
 $x + 6 = 0 \quad x - 1 = 0$
 $x = -6 \quad x = 1$