Practice worksheet | Matrices and transformations

# Solving matrix equations and systems

Name: _____ Date: _____

6 questions | 12 marks

**1.** Write $3x - y = 4$, $2x + 5y = 1$ as one matrix equation. [2 marks]

**2.** Solve $x + y = 5$, $x - y = 1$. [2 marks]

**3.** Solve $2x + 3y = 1$, $x + 2y = 2$. [2 marks]

**4.** Solve $\begin{pmatrix} 2 & 0 \\ 0 & 3 \end{pmatrix} X = \begin{pmatrix} 8 \\ 9 \end{pmatrix}$. [2 marks]

**5.** Solve $X \begin{pmatrix} 1 & 2 \\ 0 & 1 \end{pmatrix} = \begin{pmatrix} 3 & 7 \\ 1 & 4 \end{pmatrix}$. [2 marks]

**6.** A ticket model gives $2a + b = 17$ and $a + 2b = 19$. Find a and b and check both equations. [2 marks]