## Reflecting Points in Diagonal Lines



1) The points on the co-ordinate grid to the left have been reflected in the diagonal line $y=x$. Below are the co-ordinates of the reflected points. Are they correct? If not what are the correct co-ordinates?

| Reflected Point | Co-ordinates |
| :---: | :---: |
| $\mathrm{A}^{\prime}$ | $(5,3)$ |
| $\mathrm{B}^{\prime}$ | $(5,0)$ |
| $\mathrm{C}^{\prime}$ | $(2,0)$ |
| $\mathrm{D}^{\prime}$ | $(1,1)$ |
| $\mathrm{E}^{\prime}$ | $(4,-3)$ |
| $\mathrm{F}^{\prime}$ | $(3,-1)$ |
| $\mathrm{G}^{\prime}$ | $(-5,3)$ |

2) The points on the co-ordinate grid to the left have been reflected in the diagonal line $y=-x$. Below are the co-ordinates of the reflected points. Are they correct? If not what are the correct co-ordinates?

| Reflected Point | Co-ordinates |
| :---: | :---: |
| $A^{\prime}$ | $(-6,-1)$ |
| B' $^{\prime}$ | $(5,0)$ |
| C' $^{\prime}$ | $(-1,-1)$ |
| D' $^{\prime}$ | $(-4,-3)$ |
| E' $^{\prime}$ | $(-4,0)$ |
| F' $^{\prime}$ | $(3,-3)$ |
| G' $^{\prime}$ | $(2,-6)$ |


3) Choose ten points on the grid on the left and reflect them in the two diagonal lines $y=x$ and $y=-x$. List the co-ordinates of these points below.

| Point | Reflect in $y=x$ | Reflect in $y=-x$ |
| :---: | :---: | :---: |
| A |  |  |
| B |  |  |
| C |  |  |
| D |  |  |
| E |  |  |
| F |  |  |
| G |  |  |
| H |  |  |
| I |  |  |
| J |  |  |

