

August 27th

The line $y = 4x - 2$ is reflected with mirror line $y = x$

Find the equation of the image.

This is the equivalent of finding the inverse function of $f(x) = 4x - 2$

To do this, rearrange the equation to make x the subject:

$$x = \frac{y + 2}{4}$$

So the inverse function

$$f^{-1}(x) = \frac{x + 2}{4}$$

So the equation of the line is

$$y = \frac{x + 2}{4}$$