

(i)	<p>Indicate stretch and (at least one) translation</p> <p>State translation by 7 units in negative x direction</p> <p>State stretch in x direction with factor $1/m$</p> <p>Indicate translation by 4 units in negative y direction</p>	M1 A1 A1 B1	<p>[... in general terms]</p> <p>[or equiv; using correct terminology]</p> <p>[must follow the translation by 7; or equiv; using correct terminology]</p> <p>4 [or equiv; at any stage; the two translations may be combined]</p>
(ii)	<p>Refer to each y value being image of unique x value</p> <p>Attempt correct process for finding inverse</p> <p>Obtain expression involving $(x + 4)^2$ or $(y + 4)^2$</p> <p>Obtain $\frac{(x + 4)^2 - 7}{m}$</p>	B1 M1 M1 A1	<p>[or equiv]</p>
(iii)	<p>Refer to fact that curves are reflections of each other in line $y = x$</p> <p>Attempt arrangement of either $f(x) = x$ or $f^{-1}(x) = x$</p> <p>Apply discriminant to resulting quadratic equation</p> <p>Obtain $(m - 2)(m - 14) < 0$</p> <p>Obtain $2 < m < 14$</p>	B1 M1 M1 A1 A1	<p>[or equiv]</p> <p>[or equiv]</p> <p>[or equiv]</p> <p>5</p>