

Solutions

2.1 Image = $C + 2(P - C)$. Its x-coordinate is $1 + 2(3 - 1) = 5$.

2.2 Its y-coordinate is $1 + 2(2 - 1) = 3$.

2.3 Reflection in the vertical axis negates x: 3 becomes -3.

3.1 False. Centre (1,1), positive scale factor 2 maps (3,2) to (5,3). The origin is not the centre; the centre is specified independently of the factor's sign.

Local review guidance: show the chosen method; give the checked result; explain the condition or failed shortcut. This is authored classroom guidance.