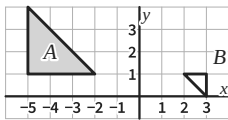
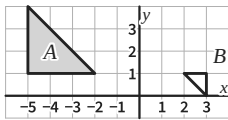


a Enlarge (6, -3) by scale factor $-\frac{1}{3}$, centre (0, 0). Find the image. $(-2, 1)$ minus a third from (0, 0)	b Enlarging by scale factor -3, centre (1, 1), gives (-5, 4). Find the original point. $(3, 0)$ working back with a negative	c The centre is (-1, 2). (5, -1) maps to (-3, 3). Find the scale factor. $-\frac{1}{3}$ a negative fraction from one point	d (1, 7) maps to (4, 1) by scale factor $-\frac{1}{2}$. Find the centre. $(3, 3)$ the centre from a point and a fraction
e Enlarge (x, y) by scale factor -2, centre (1, 3). Find the image. $(3 - 2x, 9 - 2y)$ the image of a general point	f Enlarging by scale factor k , centre (2, 0), maps (8, 6) onto the y axis. Find k . $k = -\frac{1}{3}$ a scale factor from where it lands	g C is the centre. P' is P enlarged by scale factor $-\frac{2}{3}$. Find PC : CP'. $3 : 2$ the centre splits PP' in a ratio	h Describe this enlargement fully  scale factor $-\frac{1}{3}$, centre (1, 1) describing a negative fraction fully
i A to B is scale factor k , centre C. Describe the enlargement B to A. scale factor $\frac{1}{k}$, centre C the inverse of any enlargement	j Enlarge by scale factor 2 about (0, 0), then by $\frac{1}{2}$ about (4, 0). Describe as one. translation $\begin{pmatrix} 2 \\ 0 \end{pmatrix}$ enlargements that cancel	k Enlarge by scale factor 2 about (0, 0), then by -1 about (3, 0). Describe as one. scale factor -2, centre (2, 0) two centres: a new centre	l Enlarge by scale factor 2 about (0, 0), then $-\frac{1}{2}$ about (2, 0). Describe as one. rotation 180° about (1.5, 0) enlargements making a half turn

a Enlarge (6, -3) by scale factor $-\frac{1}{3}$, centre (0, 0). Find the image. $(-2, 1)$ minus a third from (0, 0)	b Enlarging by scale factor -3, centre (1, 1), gives (-5, 4). Find the original point. $(3, 0)$ working back with a negative	c The centre is (-1, 2). (5, -1) maps to (-3, 3). Find the scale factor. $-\frac{1}{3}$ a negative fraction from one point	d (1, 7) maps to (4, 1) by scale factor $-\frac{1}{2}$. Find the centre. $(3, 3)$ the centre from a point and a fraction
e Enlarge (x, y) by scale factor -2, centre (1, 3). Find the image. $(3 - 2x, 9 - 2y)$ the image of a general point	f Enlarging by scale factor k , centre (2, 0), maps (8, 6) onto the y axis. Find k . $k = -\frac{1}{3}$ a scale factor from where it lands	g C is the centre. P' is P enlarged by scale factor $-\frac{2}{3}$. Find PC : CP'. $3 : 2$ the centre splits PP' in a ratio	h Describe this enlargement fully  scale factor $-\frac{1}{3}$, centre (1, 1) describing a negative fraction fully
i A to B is scale factor k , centre C. Describe the enlargement B to A. scale factor $\frac{1}{k}$, centre C the inverse of any enlargement	j Enlarge by scale factor 2 about (0, 0), then by $\frac{1}{2}$ about (4, 0). Describe as one. translation $\begin{pmatrix} 2 \\ 0 \end{pmatrix}$ enlargements that cancel	k Enlarge by scale factor 2 about (0, 0), then by -1 about (3, 0). Describe as one. scale factor -2, centre (2, 0) two centres: a new centre	l Enlarge by scale factor 2 about (0, 0), then $-\frac{1}{2}$ about (2, 0). Describe as one. rotation 180° about (1.5, 0) enlargements making a half turn