Enlargements – www.m4ths.com – If the shape doesn’t fit fully on the grid just draw as much as you can of it!

(1) (a) Enlarge shape A by a scale factor of 2 about the point (0,0) and label it B.
(b) Enlarge shape A by a scale factor of 3 about the point (1,0) and label it C.
(c) Enlarge shape A by a scale factor of 4 about the point (3,1) and label it D.
(d) Enlarge shape A by a scale factor of -2 about the point (0,0) and label it E.
(e) Enlarge shape A by a scale factor of -3 about the point (3,0) and label it F.

(2) (a) Enlarge shape A by a scale factor of 2 about the point (1,0) and label it B.
(b) Enlarge shape A by a scale factor of 2 about the point (0,1) and label it C.
(c) Enlarge shape A by a scale factor of 3 about the point (0,-1) and label it D. Will it fit on the grid?
(d) Enlarge shape A by a scale factor of 3 about the point (2,0) and label it E. Will it fit on the grid?
(e) Enlarge shape A by a scale factor of -2 about the point (0,0) and label it F.
(f) Enlarge shape A by a scale factor of -3 about the point (3,0) and label it G.
(3) (a) Enlarge shape A by a scale factor of -1 about the point (0,0) and label it B.
(b) Enlarge shape A by a scale factor of ½ about the point (-1,-1) and label it C.
(c) Enlarge shape A by a scale factor of –½ about the point (-1,-1) and label it D.
(d) Enlarge shape A by a scale factor of -2 about the point (0,0) and label it E.
(e) Enlarge shape A by a scale factor of 2 about the point (0,0) and label it F.
(f) Enlarge shape A by a scale factor of -2 about the point (0,1) and label it G.
(g) Enlarge shape A by a scale factor of -3 about the point (1,1) and label it H.

(4) State the single transformation that takes (i) Shape A to B and (ii) B to A.