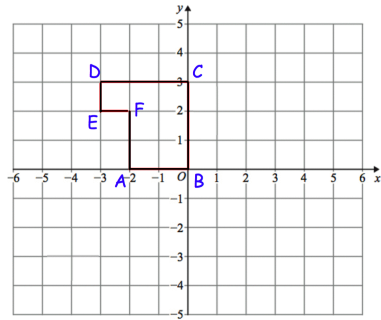




Work out

$$16^{-\frac{3}{4}}$$



Describe a single transformation so that only vertex F is invariant.

Show that the equation  $x^3 + 4x = 8$  has a solution between  $x = 1$  and  $x = 2$

Show the equation  $x^3 + 4x = 8$  can be rearranged to give

$$x = \sqrt[3]{8 - 4x}$$

Starting with  $x_0 = 1$ , use the iteration formula  $x_{n+1} = \sqrt[3]{8 - 4x_n}$  three times to find an estimate for the solution of  $x^3 + 4x = 8$