

Enlarge Shape by a **scale factor** of 3 using the origin as the **centre of enlargement (C of E)**.

1. Mark the C of E on your diagram.
2. Mark a point on your shape.
3. Write down the vector which moves

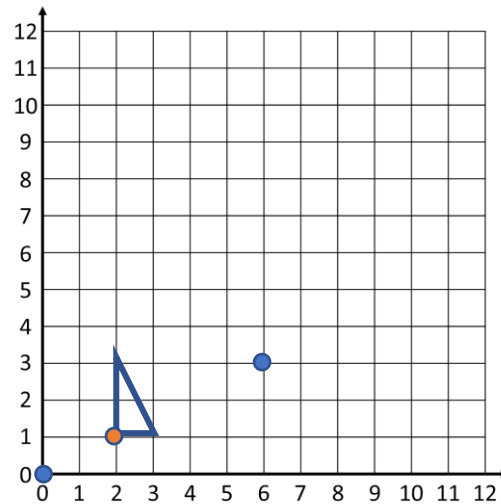
the C of E to your chosen point $\begin{pmatrix} 2 \\ 1 \end{pmatrix}$

4. Multiply your vector by the scale factor

$$3 \times \begin{pmatrix} 2 \\ 1 \end{pmatrix} = \begin{pmatrix} 6 \\ 3 \end{pmatrix}$$

5. Apply your vector FROM the C of E

6. Plot new point and draw in rest of shape



Enlarge Shape by a **scale factor** of 2 using (1, 2) as the **centre of enlargement (C of E)**.

1. Mark the C of E on your diagram.
2. Mark a point on your shape.
3. Write down the vector which moves

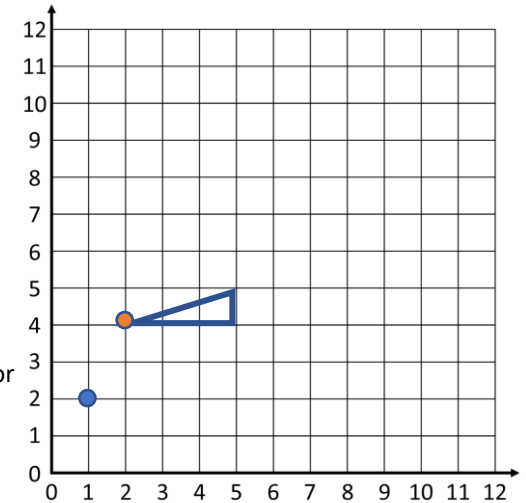
the C of E to your chosen point $\begin{pmatrix} 1 \\ 2 \end{pmatrix}$

4. Multiply your vector by the scale factor

$$2 \times \begin{pmatrix} 1 \\ 2 \end{pmatrix} = \begin{pmatrix} 2 \\ 4 \end{pmatrix}$$

5. Apply your vector FROM the C of E

6. Plot new point and draw in rest of shape



Enlarge Shape by a **scale factor** of 3 using (10, 1) as the **centre of enlargement (C of E)**.

1. Mark the C of E on your diagram.
2. Mark a point on your shape.
3. Write down the vector which moves

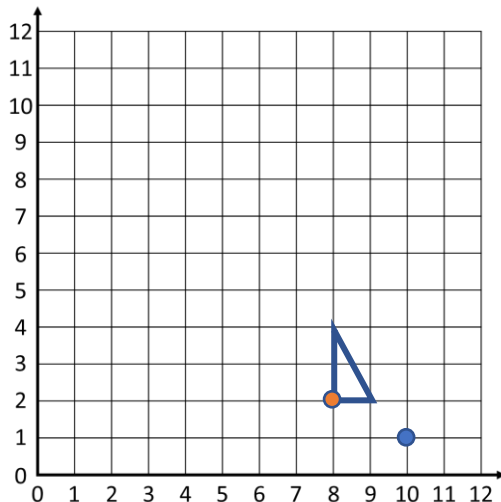
the C of E to your chosen point $\begin{pmatrix} -2 \\ 1 \end{pmatrix}$

4. Multiply your vector by the scale factor

$$3 \times \begin{pmatrix} -2 \\ 1 \end{pmatrix} = \begin{pmatrix} \dots \\ \dots \end{pmatrix}$$

5. Apply your vector FROM the C of E

6. Plot new point and draw in rest of shape



Enlarge Shape by a **scale factor** of 2 using (12, 10) as the **centre of enlargement (C of E)**.

1. Mark the C of E on your diagram.
2. Mark a point on your shape.
3. Write down the vector which moves

the C of E to your chosen point $\begin{pmatrix} \dots \\ \dots \end{pmatrix}$

4. Multiply your vector by the scale factor

$$2 \times \begin{pmatrix} \dots \\ \dots \end{pmatrix} = \begin{pmatrix} \dots \\ \dots \end{pmatrix}$$

5. Apply your vector FROM the C of E

6. Plot new point and draw in rest of shape

