

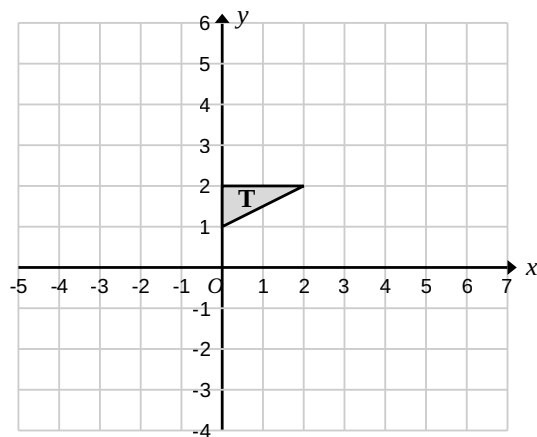
**TRANSFORMATIONS: TRANSLATIONS****Best Guess Mastery Worksheet (Target Grade 4/5)****I Do**

---

A triangle  $T$  is drawn on a coordinate grid.

Translate triangle  $T$  by the vector  $\begin{pmatrix} 4 \\ -3 \end{pmatrix}$ .

Label the new triangle  $U$ .

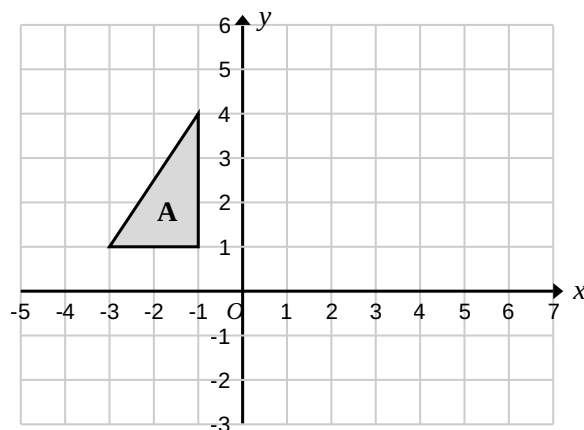
**We Do**

---

A triangle  $A$  is drawn on a coordinate grid.

Translate triangle  $A$  by the vector  $\begin{pmatrix} 5 \\ -2 \end{pmatrix}$ .

Label the new triangle  $B$ .



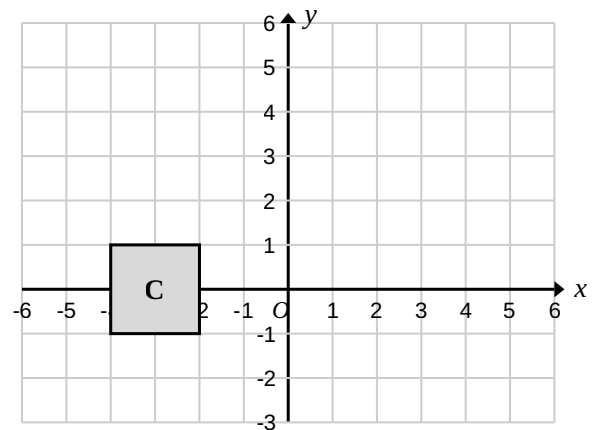
**TRANSFORMATIONS: TRANSLATIONS****Best Guess Mastery Worksheet (Target Grade 4/5)****You Do 1**

---

A rectangle  $C$  is drawn on a coordinate grid.

Translate rectangle  $C$  by the vector  $\begin{pmatrix} 3 \\ 4 \end{pmatrix}$ .

Label the new rectangle  $D$ .

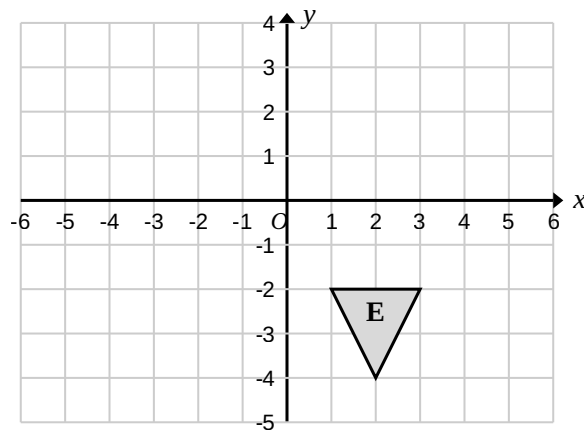
**You Do 2**

---

A triangle  $E$  is drawn on a coordinate grid.

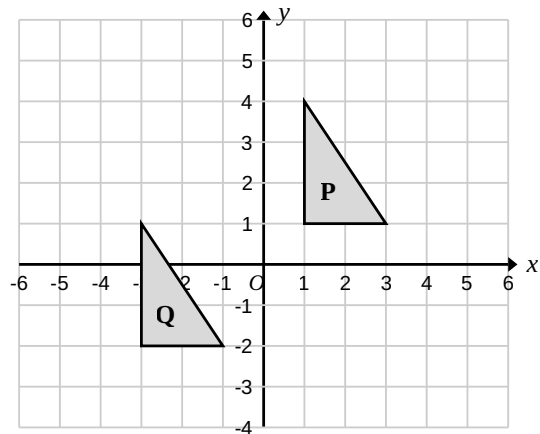
Translate triangle  $E$  by the vector  $\begin{pmatrix} -4 \\ 5 \end{pmatrix}$ .

Label the new triangle  $F$ .

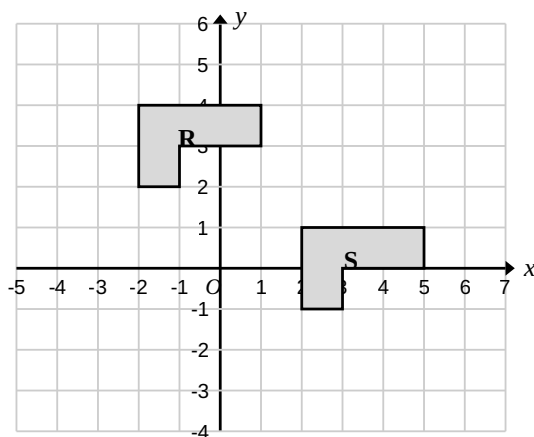


**TRANSFORMATIONS: DESCRIBING TRANSLATIONS****Best Guess Mastery Worksheet (Target Grade 4/5)****Challenge 1**

Describe fully the single transformation that maps triangle  $P$  onto triangle  $Q$ .

**Challenge 2**

Describe fully the single transformation that maps shape R onto shape S.



## **Answers & Worked Solutions**

### **I Do:**

Triangle  $U$  is drawn with vertices at  $(4, -2)$ ,  $(4, -1)$ , and  $(6, -1)$ .

### **We Do:**

Triangle  $B$  is drawn with vertices at  $(2, -1)$ ,  $(4, -1)$ , and  $(4, 2)$ .

### **You Do 1:**

Rectangle  $D$  is drawn with vertices at  $(-1, 3)$ ,  $(1, 3)$ ,  $(1, 5)$ , and  $(-1, 5)$ .

### **You Do 2:**

Triangle  $F$  is drawn with vertices at  $(-3, 3)$ ,  $(-1, 3)$ , and  $(-2, 1)$ .

### **Challenge 1:**

**Translation** by the vector  $\begin{pmatrix} -4 \\ -3 \end{pmatrix}$ .

*(Both the word "Translation" and the correct column vector are required for full marks).*

### **Challenge 2:**

**Translation** by the vector  $\begin{pmatrix} 4 \\ -3 \end{pmatrix}$ .