**Reflection GREEN**

For the following questions draw a pair of axes from –7 to +7

Question 1

(a) Plot and label $A(-6,4)$, $B(-6,7)$, $C(-4,7)$.

(b) Draw the lines $y=3$ and $x=-2$.

(c) Draw the image of triangle $ABC$ after reflection in:

1. the $x$-axis. Label it ▲ 1.
2. the $y$-axis. Label it ▲ 2.
3. the line $y=3$. Label it ▲3.
4. the line $x=-2$. Label it ▲ 4 .

(d) Write down the coordinates of the image of point $A$ in each case.

Question 2

(a) Plot and label $P(7,-5)$, $Q(7,-1)$, $R(5,-1)$.

(b) Draw the lines $y=x$ and $y=-x$.

(c) Draw the image of triangle $PQR$ after reflection in;

1. the $x$-axis. Label it ▲ 1.
2. the line $y=x$. Label it ▲ 2.
3. the line $y=-x$. Label it ▲3.

(d) Write down the coordinates of the image of point $P$ in each case.

Question 3

(a) Draw the lines $y=-1$, $x=3$ and $y=x+4$.

(b) Draw ▲1 at $(1,7)$, $(-3, 7)$, $(-3,5)$.

(c) Reflect ▲1 in the line $y=x+4$ onto▲2.

(d) Reflect ▲2 in the line $y=-1$ onto ▲3.

(e) Reflect ▲3 in the line $x=3$ onto ▲4.

(f) Write down the coordinates of ▲4.

**Reflection AMBER**

Reflect in $y=-x$ Reflect in $y=0$

 

Reflect in $y=-x$ Reflect in $y=0$

 

Reflect in $y=x$ Reflect in $x=0$

 

**Reflection RED**

Reflect in $y=-x$ Reflect in $y=0$

**1) Draw the line of symmetry.**

2) Flip the shape over the line:

a) Place the tracing paper over the top and draw on the line of symmetry and the object.

b) Flip the tracing paper and line up the line of symmetry.

c) Remove the tracing paper.

3) Draw the new shape.

 

Reflect in $y=-x$ Reflect in $y=0$

 

Reflect in $y=x$ Reflect in $x=0$

 