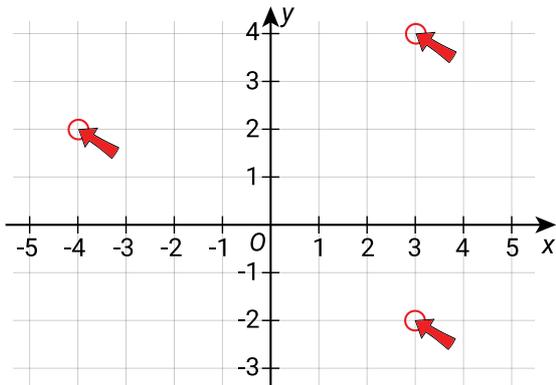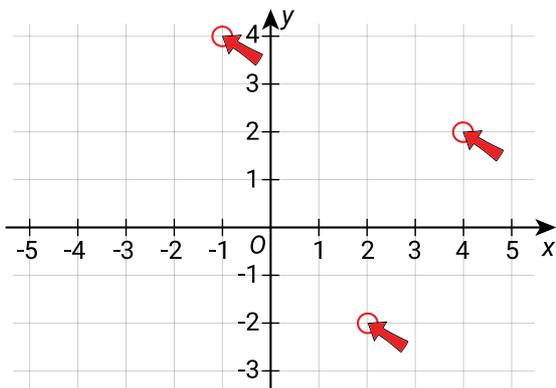# Year 8 Class 18 questions

Q1

Plot the points: (3,4)   (3,-2)   (-4,2)

Q2

Plot the points: (4,2)   (2,-2)   (-1,4)

Q3

Complete the table for $y = x + 3$.
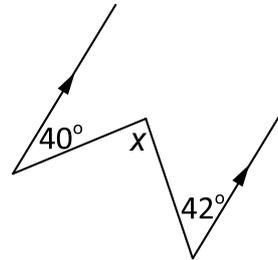
x	0	1	2	3
y	3	4	5	6

Q4

Complete the table for $y = x - 1$.

x	0	1	2	3
y	-1	0	1	2

Q5

Find the value of x. $\boxed{}°$

82°

40° x 42°
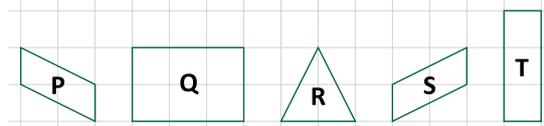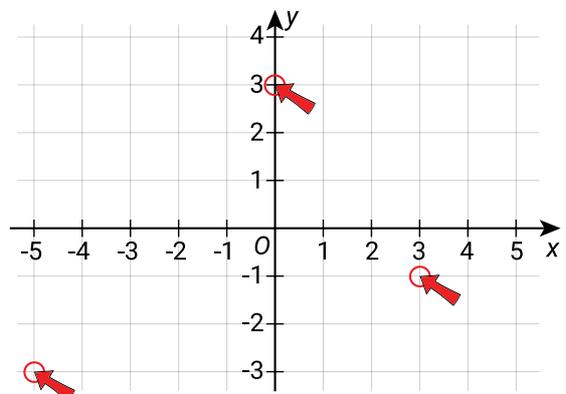
Q6

Find a pair of congruent shapes and decide which transformation could be used to map one onto the other.
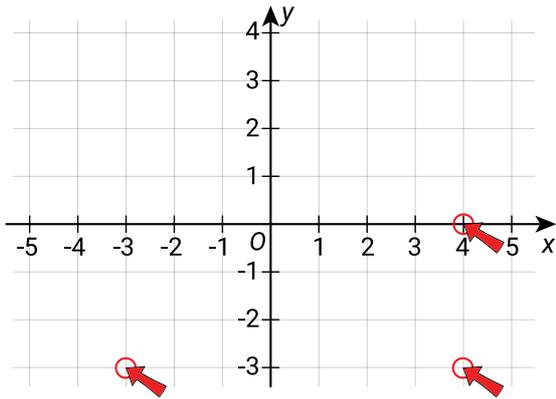

- ○ P and S → rotation
- ○ P and S → reflection
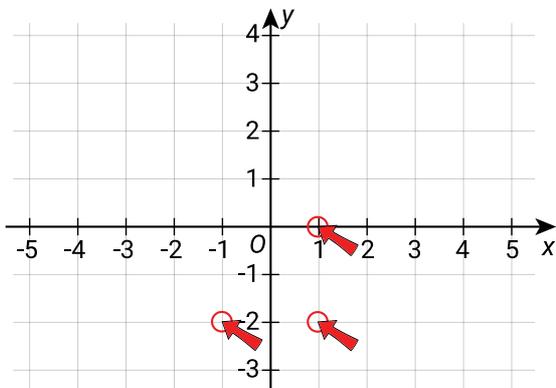- ○ Q and T → rotation
- ○ Q and T → enlargement

Q7

Plot the points: (0,3)   (3,-1)   (-5,-3)

Q8

Plot the points: (4,0)   (4,-3)   (-3,-3)
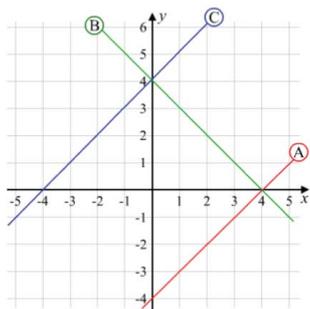
Q9

Plot the points: (1,0)   (1,-2)   (-1,-2)

Q10

Complete the table for $y = 4 - x$.

x	0	1	2	3
y				
	4	3	2	1

Which is the graph of $y = 4 - x$?

○ A
➡ ○ B
○ C

Q11

Complete the table for $y = 4x - 2$.

x	0	1	2	3
y				
	-2	2	6	10

Which is the graph of $y = 4x - 2$?
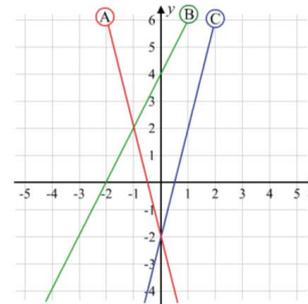
○ A
○ B
➡ ○ C

Q12

Complete the table for $y = x - 1$.

x	0	1	2	3
y				
	-1	0	1	2

Which is the graph of $y = x - 1$?
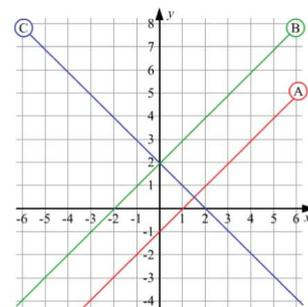
➡ ○ A
○ B
○ C

Q13

Find the value of x, y and z.
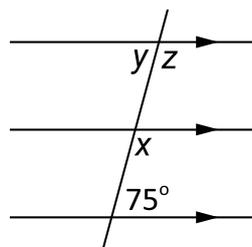
$x = \boxed{}$ °
105°

$y = \boxed{}$ °
75°

$z = \boxed{}$ °
105°

Q14

Find the value of a and b.

40°

b

53° a

$a = \boxed{}$ °
40°
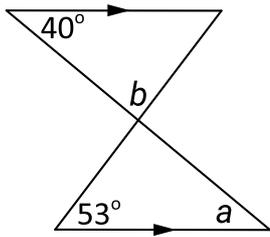
$b = \boxed{}$ °
87°

Q15

Find the value of p. $\boxed{}$ °
36

p

$2p$
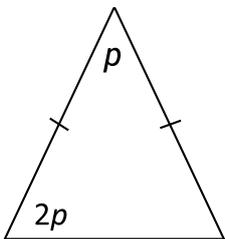
Q16

Find the coordinates of the image points when the shape is reflected over the y-axis.

$A \longrightarrow A'(1,2)$

$B \longrightarrow B'(\boxed{})$
5,5
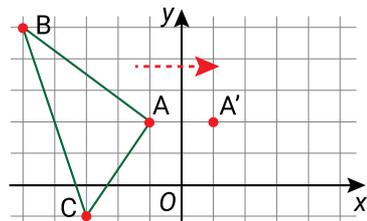
$C \longrightarrow C'(\boxed{})$
3,-1

Q17

Find the coordinates of the image points when the shape is reflected over the y-axis.

$A \longrightarrow A'(2,5)$

$B \longrightarrow B'(\boxed{})$
0,-1

$C \longrightarrow C'(\boxed{})$
5,2

Q18

Find the coordinates of the image points when the shape is reflected over the y-axis.

$A \longrightarrow A'(-2,5)$
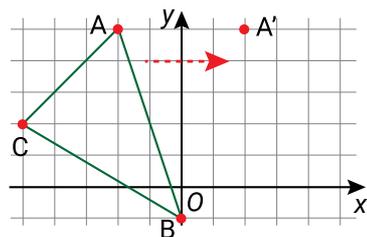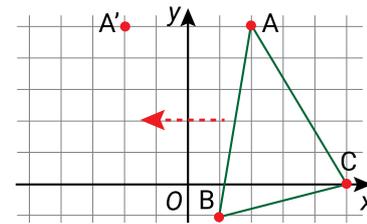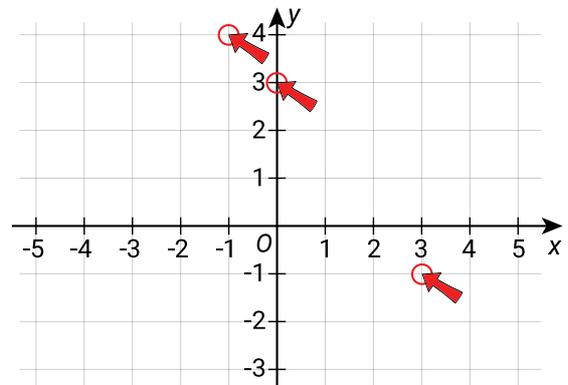
$B \longrightarrow B'(\boxed{})$
-1,-1

$C \longrightarrow C'(\boxed{})$
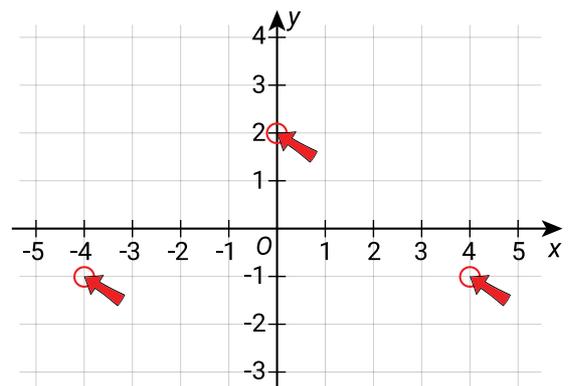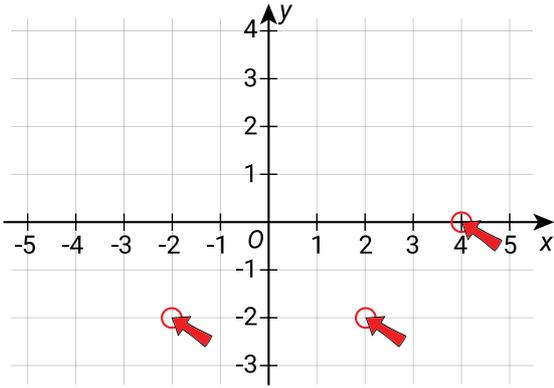*-5,0*

Q19

Plot the points: (0,3)   (3,-1)   (-1,4)

Q20

Plot the points: (0,2)   (4,-1)   (-4,-1)
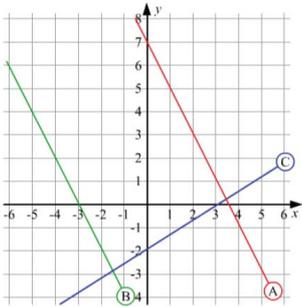
Q21

Plot the points: (4,0)   (2,-2)   (-2,-2)

Q22

Complete the table for $y + 2x = 7$.

x	0	1	2	3
y				
	7	5	3	1

Which is the graph of $y + 2x = 7$?

→ O A
　O B
　O C

Q23

Complete the table for $y = \frac{x}{3} + 3$.

x	-3	0	3	6
y				
	2	3	4	5

Which is the graph of $y = \frac{x}{3} + 3$?
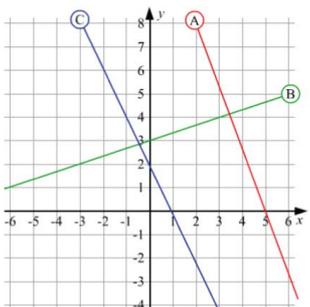
　O A
→ O B
　O C

Q24

Complete the table for $y = 2(x - 1)$.

x	-1	0	1	2
y				
	-4	-2	0	2

Which is the graph of $y = 2(x - 1)$?
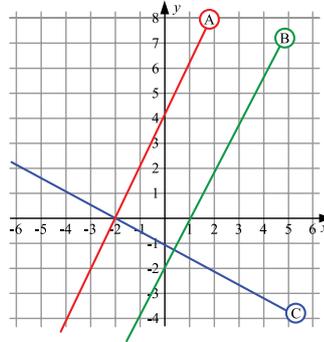
　O A
→ O B
　O C

Q25

Find the value of *m* and *h*.

$m =$ ☐ °
65°

$h =$ ☐ °
85°
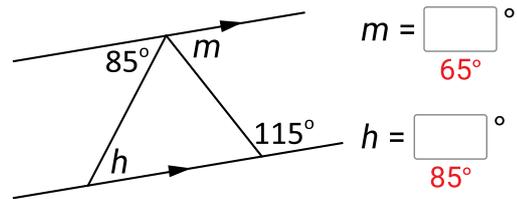
Q26

Find the value of *x* and *z*.

$x =$ ☐ °
22°

$z =$ ☐ °
28°
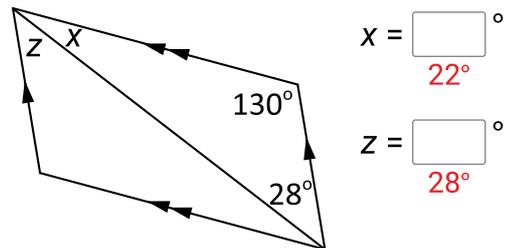
Q27

Find the value of *x* and *y*.

$x =$ ☐ °
30°

$y =$ ☐ °
30°
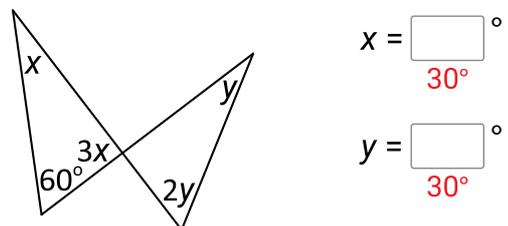
Q28

Two congruent triangles are shown.

What transformation has been used?
○ reflection ▶ rotation ○ translation

Use the grid to find the length of AC.
▶ 2 units ○ 3 units ○ 4 units

What is the length of $A'B'$?
○ 3 units ○ 3.5 units ▶ 4 units

What is the area of $\triangle A'B'C'$?
▶ 4 units² ○ 5 units² ○ 6 units²

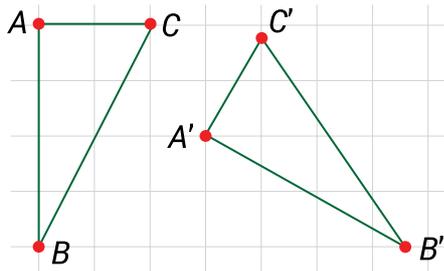## Q29

Two congruent triangles are shown.

What transformation has been used?
▶ reflection ○ rotation ○ translation

Use the grid to find the length of BC.
▶ 3 units ○ 4 units ○ 5 units
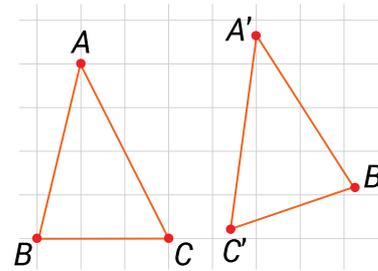
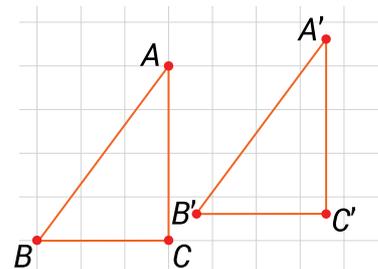What is the length of $B'C'$?
○ 2.5 units ▶ 3 units ○ 4 units

What is the area of $\triangle A'B'C'$?
○ 4 units² ○ 5 units² ▶ 6 units²

Q30

Two congruent triangles are shown.

What transformation has been used?
○ reflection ○ rotation ▶ translation

Use the grid to find the length of BC.
▶ 3 units ○ 4 units ○ 5 units

What is the length of $A'C'$?
○ 3 units ○ 3.5 units ▶ 4 units

What is the area of $\triangle A'B'C'$?
○ 4 units² ▶ 6 units² ○ 8 units²