

## Question 1

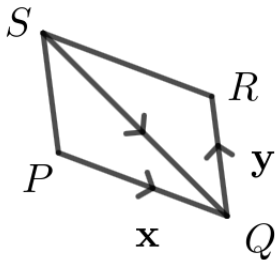
Solve by factorising:

$$x^2 - 6x - 40 = 0$$

## Question 2

 $P$  has coordinates  $(7, -7)$ . $Q$  has coordinates  $(19, k)$ .The gradient of  $PQ$  is 2.Find the value of  $k$ .

## Question 3

 $PQRS$  is a parallelogram.Find  $\overrightarrow{SQ}$  in terms of  $\mathbf{x}$  and  $\mathbf{y}$ 

## Question 4

SIB Bank pays 3% compound interest each year.

ALN Bank also pays compound interest, but at 5.4% for the first year and at 1.7% each extra year.

Which bank would pay more interest on a £2900 investment over 3 years?

## Question 1

Solve by factorising:

$$x^2 - 6x - 40 = 0$$

$$(x + 4)(x - 10) = 0$$

$$x = -4, x = 10$$

## Question 2

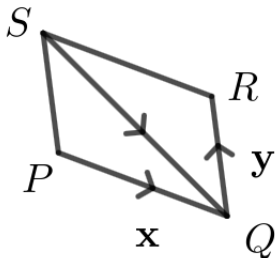
 $P$  has coordinates  $(7, -7)$ . $Q$  has coordinates  $(19, k)$ .The gradient of  $PQ$  is 2.Find the value of  $k$ .

$$k = 17$$

## Question 3

 $PQRS$  is a parallelogram.Find  $\overrightarrow{SQ}$  in terms of  $\mathbf{x}$  and  $\mathbf{y}$ 

$$\mathbf{x} - \mathbf{y} \text{ or } -\mathbf{y} + \mathbf{x}$$



## Question 4

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SIB