

## Question 1

Solve by factorising:

$$x^2 + 2x = 0$$

## Question 2

$P$  has coordinates  $(6, -6)$ .

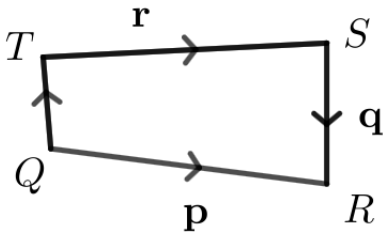
$Q$  has coordinates  $(k, 148)$ .

The gradient of  $PQ$  is 11.

Find the value of  $k$ .

## Question 3

Find  $\overrightarrow{QT}$  in terms of  $\mathbf{p}$ ,  $\mathbf{q}$ , and  $\mathbf{r}$



## Question 4

SIB Bank pays 1.2% compound interest each year.

ALN Bank also pays compound interest, but at 4.4% for the first year and at 0.5% each extra year.

Which bank would pay more interest on a £7800 investment over 5 years?

## Question 1

Solve by factorising:

$$x^2 + 2x = 0$$

$$x(x + 2) = 0$$

$$x = 0, x = -2$$

## Question 2

$P$  has coordinates  $(6, -6)$ .

$Q$  has coordinates  $(k, 148)$ .

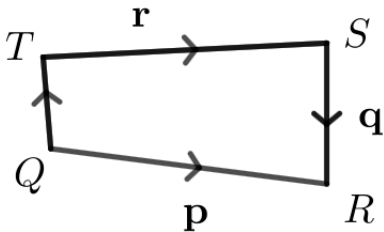
The gradient of  $PQ$  is 11.

Find the value of  $k$ .

$$k = 20$$

## Question 3

Find  $\overrightarrow{QT}$  in terms of  $\mathbf{p}$ ,  $\mathbf{q}$ , and  $\mathbf{r}$

$$\mathbf{p} - \mathbf{q} - \mathbf{r}$$


## Question 4

SIB Bank pays 1.2% compound interest each year.

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Which bank would pay more interest on a £7800 investment over 5 years?

ALN