

1 Solve $x^2 + 5x + 3 = 0$

Give your solutions correct to 2 decimal places.

.....
(Total for question 1 is 3 marks)

2 Solve $2x^2 + 13x + 7 = 0$

Give your solutions correct to 2 decimal places.

.....
(Total for question 2 is 3 marks)

3 Solve $3x^2 + 2x - 13 = 0$

Give your solutions correct to 1 decimal place.

.....
(Total for question 3 is 3 marks)

4 Solve $5x^2 + x - 11 = 0$

Give your solutions correct to 3 significant figures.

(Total for question 4 is 3 marks)

5 Solve $3x^2 - 11x - 13 = 0$

Give your solutions correct to 3 significant figures.

(Total for question 5 is 3 marks)

6 Solve $5x^2 = 6x + 3$

Give your solutions correct to 3 significant figures.

(Total for question 6 is 3 marks)

7 Solve $x^2 + 2x - 7 = 0$

Give your answers in the form $a \pm b\sqrt{c}$.

.....
(Total for question 7 is 4 marks)

8 Solve $x^2 - 4x - 1 = 0$

Give your answers in the form $a \pm \sqrt{b}$.

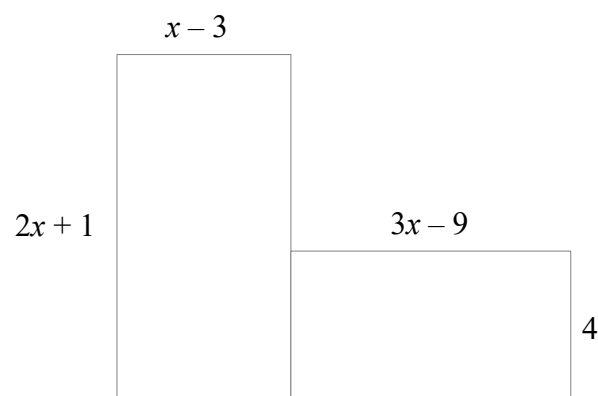
.....
(Total for question 8 is 4 marks)

9 Solve $x^2 + 6x - 11 = 0$

Give your answers in the form $a \pm b\sqrt{c}$.

.....
(Total for question 9 is 4 marks)

- 10** The diagram shows a six sided shape formed from two rectangles.
All measurements are given in centimetres.



The area of the shape is 24cm^2

- (a) Show that $2x^2 + 7x - 63 = 0$

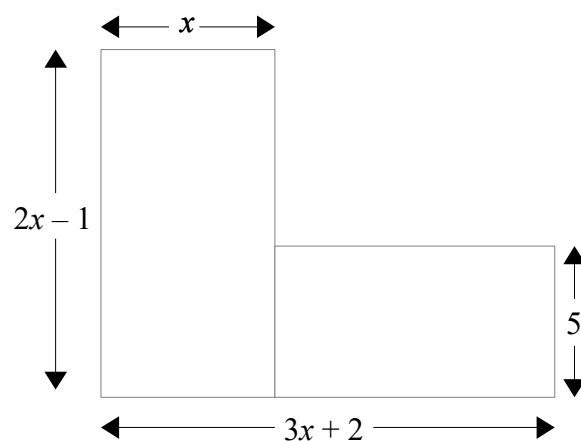
- (b) Find the value of x
Give your answer to 3 significant figures

(2)

.....
(3)

(Total for question 10 is 5 marks)

- 11 The diagram shows a six sided shape formed from two rectangles.
All measurements are given in centimetres.



The area of the shape is 35cm^2

- (a) Show that $2x^2 + 9x - 25 = 0$

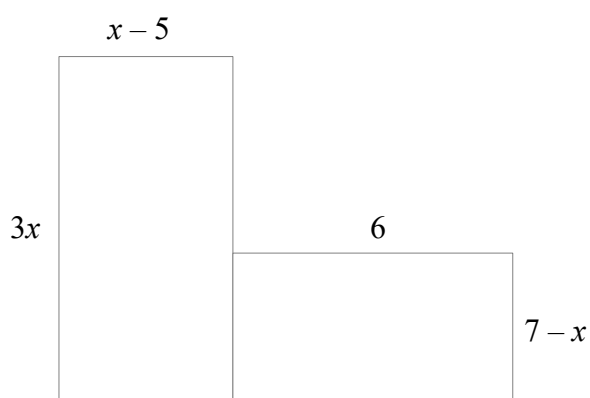
- (b) Find the value of x
Give your answer to 3 significant figures

(2)

(3)

(Total for question 11 is 5 marks)

- 12 The diagram shows a six sided shape formed from two rectangles.
All measurements are given in centimetres.



The area of the shape is 26cm^2

- (a) Show that $3x^2 - 21x + 16 = 0$

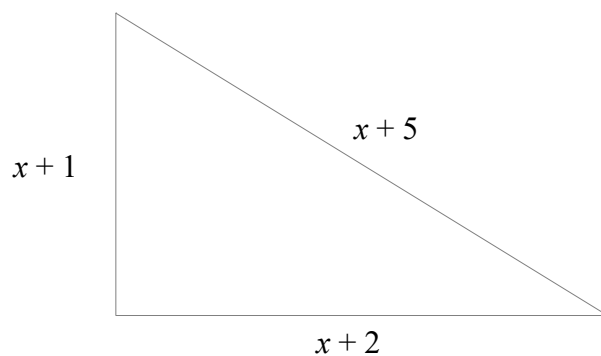
- (b) Find the value of x
Give your answer to 3 significant figures

(2)

.....
(3)

(Total for question 12 is 5 marks)

- 13** The diagram shows a right angled triangle.
All measurements are given in centimetres.



- (a) Show that $x^2 - 4x - 20 = 0$

- (b) Find the value of x

(3)

Give your answer in the form $a \pm b\sqrt{c}$.

.....
(3)

(Total for question 13 is 6 marks)