



SCAN ME

# Quadratic Inequalities



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← REVISE THIS TOPIC

→ CHECK YOUR ANSWERS

1 Solve  $x^2 + 7x + 10 < 0$

.....  
(Total for Question 1 is 2 marks)

2 Solve  $x^2 - 9x + 20 > 0$

.....  
(Total for Question 2 is 2 marks)

3 Solve  $x^2 + 3x - 15 < 0$

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



4 Solve  $x^2 + x - 12 > 0$

.....  
(Total for Question 4 is 2 marks)

5 Solve  $x^2 - 2x - 24 \leq 0$

.....  
(Total for Question 5 is 2 marks)

6 Solve  $x^2 - 17x + 30 \geq 0$

.....  
(Total for Question 6 is 2 marks)

7 Solve  $x^2 - 25 \leq 0$

.....  
(Total for Question 7 is 2 marks)



8 Solve  $2x^2 - 7x - 15 > 0$

.....  
(Total for Question 8 is 3 marks)

9 Solve  $3x^2 + 17x - 6 \leq 0$

.....  
(Total for Question 9 is 3 marks)

10 Solve  $5x^2 - 13x + 6 \geq 0$

.....  
(Total for Question 10 is 3 marks)

11 Solve  $2x^2 + 15x + 24 < 3 - 2x$

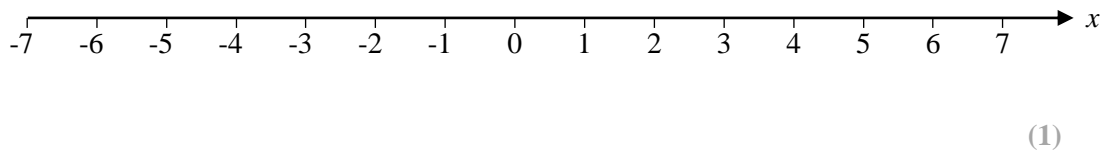
.....  
(Total for Question 11 is 4 marks)



12 (a) Solve  $x^2 - 2x - 8 < 0$

.....  
(2)

(b) Show the solution to  $x^2 - 2x - 8 < 0$  on the number line below.

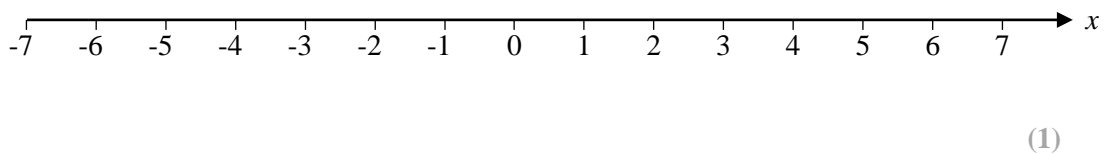


(Total for Question 12 is 3 marks)

13 (a) Solve  $x^2 - 7x + 10 \leq 0$

.....  
(2)

(b) Show the solution to  $x^2 - 7x + 10 \leq 0$  on the number line below.



(Total for Question 13 is 3 marks)



14 Find a set of possible values of  $x$  for which

$$4x - 5 < 19 \quad \text{and} \quad x^2 - 8x - 20 < 0$$

.....  
(Total for Question 14 is 4 marks)

15 Find a set of possible values of  $x$  for which

$$6x + 1 > 16 \quad \text{and} \quad x^2 - 8x + 12 < 0$$

.....  
(Total for Question 15 is 4 marks)



**16** Find a set of possible values of  $x$  for which

$$x^2 - 11x + 10 < 0 \quad \text{and} \quad 2x^2 + 3x - 20 < 0$$

.....  
**(Total for Question 16 is 5 marks)**

**17** Find a set of possible values of  $x$  for which

$$x^2 - 9 \geq 0 \quad \text{and} \quad 2x^2 - 13x + 15 < 0$$

.....  
**(Total for Question 17 is 5 marks)**

