Name:

Level 2 Further Maths

Inequalities



Ensure you have: Pencil or pen

Guidance

- 1. Read each question carefully before you begin answering it.
- 2. Check your answers seem right.
- 3. Always show your workings

Revision for this topic

www.corbettmaths.com/more/further-maths/



1. Solve the inequality $\frac{2-5x}{3} > -4$

(2)

2. Write down the largest integer that satisfies $\frac{10-3x}{9} > 15$

(3)

3.	Write down	all the	integer	solutions to
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$$-9 < \frac{x}{4} - 1 < -8$$

(3)

4. Find the range of values of x that satisfies both

$$3(x+2) \le 30$$
 and $4x+3 > 21$

(4)

5.	Solve	the	ineo	ıualitv	/
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$$8(x-2) - 3(1-x) \le 9(x+2) + 1$$

(4)

6.
$$-5 < a < -1$$
 and $-2 < b < -1$

Write down an inequality for each of the following

(a) ab

(2)

(b) b^2

(2)

7.	$-1 \le c \le 10$	and	$-4 \le d \le -2$	
	Write down an ine	equality for e	each of the following	
	(a) $d-c$			
				 (2)
	(b) c^2			
	(4)			
				 •
				(2)
	(c) $\frac{c}{d}$			
	\boldsymbol{a}			

(2)	
\	

(d)
$$(c+d)^2$$
(2)

8.	Solve	x^2	>	36
○.		20	_	\sim

(2)

9. Solve the inequality $x^2 - 13x + 22 < 0$

(3)

10. Solve the inequality $x^2 + 9x + 18 \ge 0$

(3)

11.	Solve the inequality	$x^2 + 3x - 4 > 0$
	colve the inequality	$\lambda + 3\lambda + 7 = 0$

(3)

12. Solve the inequality $x^2 - 4x - 32 \le 0$

(3)

13. Solve the inequality $-x^2 + 3x + 10 > 0$

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14.	Solve the inequality	$5x^2 + 7x + 2 > 0$

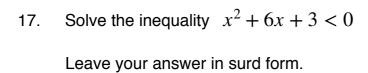
(4)

15. Solve the inequality $3x^2 + 8x - 3 \le 0$

(4)

16. Solve the inequality $4x^2 - 11x + 6 < 0$

(4)



(4)

18. Solve the inequality $(2x + 5)^2 - 3x(x + 2) > 0$

(4)