

# ALGEBRAIC INEQUALITIES

(e) Solve  $5x - 6 < 30$ .

[2]

(b) Solve the inequality  $15t < 4t + 7$ .

[2]

(b) Solve  $6x < 2x + 24$ .

[2]

(c) Solve  $3 - 2n > 4n - 9$ .

[2]

[2]

[2]

(b) Solve the inequality  $5(t - 2) > 3t + 14$ .

[3]

(d) Solve the inequality  $9x + 5 < 77$ .

[2]

.....  
.....  
.....  
.....  
.....  
.....  
.....

(e) Write down the smallest whole number that satisfies the inequality  $4x > 45$ .

[2]

.....  
.....  
.....  
.....

Smallest whole number is .....

4370  
050005

12. (a) Solve the inequality

$$7x - 3 < 14 + 4x.$$

.....  
.....  
.....  
.....  
.....

[2]

(b) Write down the largest whole number that satisfies this inequality.

.....

[1]

(0184/7)

(c) Solve the inequality  $45 + y < 7y - 3$ .

Write your answer in the form  $y > a$  where  $a$  is a whole number.

.....  
.....  
.....  
.....

$y > \dots\dots\dots$

[3]

15. (a) Solve the inequality

$$13 - 3x \geq 22 - 7x.$$

.....  
.....  
.....

[2]

(b) Write down the smallest whole number that satisfies this inequality.

.....

[1]

11. (a) Solve the inequality

$$5x + 3 > 24 - 2x.$$

.....  
.....  
.....  
.....

[2]

(b) Write down the smallest whole number that satisfies this inequality.

.....

[1]

10. (a) Rearrange the inequality  $3 - 3n < 9 - 5n$  into the form  $n < \text{some number}$ .

.....  
.....  
.....

[2]

(b) Given that  $n$  also satisfies the inequality  $3n > -6$ , write down all the integer values of  $n$  that satisfy both inequalities.

.....  
.....  
.....

[2]