

# Solving simultaneous equations by elimination (1)

27a

Name: \_\_\_\_\_



Solve:

a)  $4x + 3y = 19$   
 $x + 3y = 7$

d)  $3x + y = 16$   
 $4x + y = 18$

b)  $2x + 6y = 34$   
 $2x + 3y = 19$

e)  $4x + 6y = 32$   
 $x + 2y = 10$

c)  $6x + 3y = 39$   
 $6x + 8y = 64$

f)  $3x + 3y = 9$   
 $5x + 9y = 3$

Solve:

g)  $2x - 3y = -16$   
 $3x + 3y = 21$

i)  $5x - 2y = 31$   
 $3x + 2y = 25$

h)  $7x + y = 44$   
 $x - y = 4$

j)  $-2x + 5y = 14$   
 $2x + 3y = 18$

## Exam question:

Two families go to a theatre production.  
The Parker family of two adults and three children pay £69.  
The Rogers family of three adults and five children pay £109.  
Work out the cost of an adult ticket and a child ticket.



# Solving simultaneous equations by elimination (2)

27b

Name: \_\_\_\_\_



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Solve:

e)  $2x + y = 14$   
 $3x - y = 16$

g)  $4x + 7y = 39$   
 $-4x + 3y = -29$

f)  $x - y = -4$   
 $x + 6y = 24$

h)  $4x + 2y = 8$   
 $8x - 7y = 60$

Solve:

a)  $3x + y = 15$   
 $4x + 5y = 53$


d)  $2x + y = 10$   
 $5x - 7y = -51$

b)  $7x + 5y = 10$   
 $x + 2y = -5$

e)  $7x - 2y = 1$   
 $8x - 6y = 16$

c)  $5x + 2y = 24$   
 $4x - 6y = 4$

f)  $7x + 4y = 10$   
 $8x - 9y = -70$

 **Exam question:**

I think of two numbers.

When I double the first number and add on the second, I get 17.

When I treble the first number and subtract the second, I get 18

What are the two numbers I am thinking of?

