

# SOLVE SIMULTANEOUS EQUATIONS BY SUBSTITUTION

## SKILLS QUESTIONS

Solve these pairs of simultaneous equations by substitution.  
Remember to find both  $x$  and  $y$ .

Q1.  $x = 8 - 2y$   
 $2x + 3y = 13$

Q2.  $y = 4 = x$   
 $5x - 3y = 0$

Q3.  $3x - 2y = 8$   
 $x = 3y + 12$

Q4.  $y = 5x$   
 $7x - 2y = 3$

Q5.  $y = 7 - 2x$   
 $x + 2y = 8$

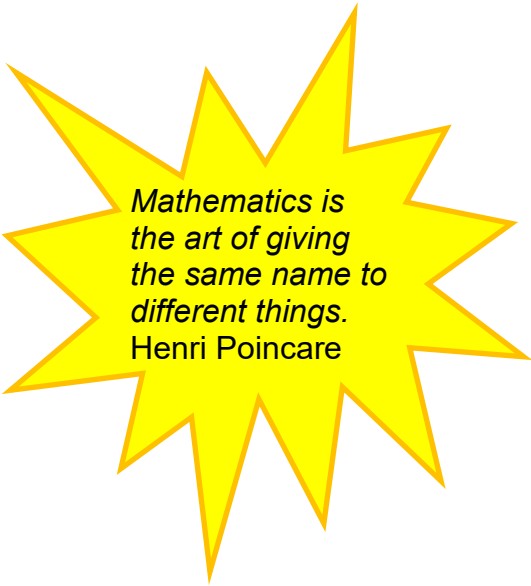
Q6.  $y = 5x + 7$   
 $y = 2x + 1$

Q7.  $y = 4x - 12$   
 $3x - 5y = 26$

Q8.  $x = -2 - 3y$   
 $3x - 2y = -17$

Q9.  $x = 2y - 1$   
 $x = 3y - 6$

Q10.  $y = 4x - 2$   
 $8x + y = -5$



*Mathematics is  
the art of giving  
the same name to  
different things.*  
Henri Poincaré

# ANSWERS

Q1. 2, 3

Q2. 6, -2

Q3. 0, -4

Q4. -1, -5

Q5. 2, 3

Q6. -2, -3

Q7. 2, -4

Q8. -5, 1

Q9. 9, 5

Q10.  $-\frac{1}{4}$ , -3