Name:

Level 2 Further Maths

Simultaneous Equations with 3 Unknowns

Corbettmaths

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 simultaneous equations

$$x - y + 3z = 5$$

$$x + y + 6z = 12$$

$$3x - 2y + 2z = 10$$

$x =$ ..... $y =$ ..... $z =$ .....

(5)

2. Solve the simultaneous equations

$$2x + 3y + 5z = 21$$

$$3x + 6y + 15z = 51$$

$$5x + 4y + 10z = 37$$

$x =$ ..... $y =$ ..... $z =$ .....

(5)

3. Solve the simultaneous equations

$$2x + 4y - z = 15$$

$$3x + 8y + z = 44$$

$$x + 2y + 2z = 15$$

$x =$ ..... $y =$ ..... $z =$ .....

(5)

4. Solve the simultaneous equations

$$10x + 60y + 10z = 25$$

$$5x + 40y + 20z = 40$$

$$20x + 20y + 40z = 30$$

$x =$ ..... $y =$ ..... $z =$ .....

(5)

5. Solve the simultaneous equations

$$x + y + z = 1$$

$$4x - 3y + 4z = 32$$

$$x - 10y - 2z = 27$$

$x =$ ..... $y =$ ..... $z =$ .....

(5)

6. Solve the simultaneous equations

$$6x + 8y - 2z = 750$$

$$18x - 2y + 4z = 1100$$

$$4x - 4y + 2z = 100$$

$x =$ ..... $y =$ ..... $z =$ .....

(5)

7. Solve the simultaneous equations

$$7x + 5y + 4z = 23$$

$$21x - 10y + 6z = -4$$

$$7x + 15y - 2z = -15$$

$x =$ ..... $y =$ ..... $z =$ .....

(5)

8. Solve the simultaneous equations

$$y - x + 2z = 2.1$$

$$3x - 2z - y + 2.5 = 0$$

$$8z + 10y + 5x = 4.5$$

$x =$ ..... $y =$ ..... $z =$ .....

(5)