Simultaneous Equations

Workout

Question 1:

(a) x=2
   y=6

(b) x=1
   y=3

(c) x=3
   y=2

(d) x=15
   y=6

(e) x=5
   y=6

(f) x=3
   y=0.5

(g) x=4
   y=1

(h) x=23
   y=5

(i) x=2.5
   y=11

(j) x=9
   y=2

(k) x=30
   y=15

(l) x=18
   y=5

(m) x=14
   y=6

(n) x=40
   y=50

(o) x=-3
   y=4

(p) x=-4
   y=-1

(q) x=20
   y=-9

(r) x=0
   y=4

Question 2:

(a) x=5
   y=4

(b) x=5
   y=2

(c) x=4
   y=9

(d) x=11
   y=10

(e) x=7.5
   y=3.5

(f) x=7
   y=1

(g) x=10
   y=20

(h) x=7
   y=3

(i) x=19
   y=5

(j) x=4
   y=8

(k) x=-2
   y=2

(l) x=3
   y=-6

(m) x=-3
   y=1

(n) x=-2
   y=-3

(o) x=6
   y=2

(p) x=1
   y=-1

(q) x=10
   y=-3

(r) x=-2
   y=-20

Question 3:

(a) x=5
   y=2

(b) x= -4
   y= 3

(c) x=2
   y=4

| (d) x=8 | (e) x=-1 | (f) x=-4 |
| y=2 | y=5 | y=2 |

| (g) x=5 | (h) x=2.5 | (i) x=11 |
| y=2 | y=1 | y=10 |

| (j) x=9 | (k) x=-8 | (l) x=6 |
| y=9 | y=3 | y=2 |

| (m) x=9 | (n) x=2 | (o) x=6 |
| y=5 | y=-7 | y=4 |

| (p) x=3 | (q) x=3 | (r) x=8 |
| y=-1 | y=-3 | y=-1 |

Question 4:

| (a) x=7 | (b) x=6 | (c) x=8 |
| y=3 | y=2 | y=-2 |

| (d) x=10 | (e) x=-2 | (f) x=4 |
| y=4 | y=22 | y=-15 |

Apply

Question 1:   Coffee is £2.50   Tea is £1.50

Question 2:   Rosemary is 77   Hannah is 25

Question 3:   Adult ticket is £9.50   Child ticket is £3.50

Question 4:   £765

Question 5:   £80

Question 6:   120 rulers and 80 pens

Question 7:   £4.20

Question 8:

$$3x + 5y = 1 \quad \text{x2}$$
$$2x - 3y = 7 \quad \text{x3}$$

Do not use trial and improvement

$$6x + 10y = 2$$
$$- \quad 6x - 9y = 21$$
$$\overline{}$$
$$19y = 23 \div 19$$
$$y = 1.21$$
$$-1$$

Using y=-1 you would then find that x=2