Factorisation

Workout

Question 1

(a) $2(2x + 3)$	(b) $5(3x + 4)$	(c) $3(3y - 4)$	(d) $5(x + 3)$
(e) $3(2x - 1)$	(f) $4(x + 2)$	(g) $5(y - 5)$	(h) $8(w + 3)$
(i) $5(2y + 3)$	(j) $7(2w + 3)$	(k) $10(2y - 3)$	(l) $9(3x + 2)$
(m) $2(3 - 2x)$	(n) $3(3 + 4y)$	(o) $15(3 + 4x)$	(p) $16(y - 2)$
(q) $11(2a + 5)$	(r) $20(5 - 2y)$	(s) $3(2x + 3y)$	(t) $2(2w - a)$
(u) $5(5y - 7z)$	(v) $4(2x^2 + 5)$	(w) $15(2y^3 - 1)$	
(x) $14(3y + 2x - 4c)$			

Question 2

(a) $x(x + 7)$	(b) $x(x - 3)$	(c) $y(y + 1)$	(d) $w(w + 9)$
(e) $x(x - 7)$	(f) $2w(2w + 5)$	(g) $2x(3x - 4)$	(h) $3y(3y - 2)$
(i) $c(10 + c)$	(j) $g(5 - g)$	(k) $7x(2x + 5)$	(l) $10x(4x - 5)$
(m) $6x(2x + 3)$	(n) $6x(4x - 3)$	(o) $15y(3y + 4)$	(p) $w(7w + 2)$

Question 3

(a) $x(x + y)$	(b) $a(a - b)$	(c) $x(y + z)$	(d) $a(b + c - d)$
(e) $2c(3c - 2d)$	(f) $5x(2x + 3y)$	(g) $6b(2a + 3c)$	(h) $4y(2x + y)$
(i) $2cd(4f + 5e)$	(j) $w(7w + 6 + y)$	(k) $2ab(4b - 5)$	(l) $2xy(2y + 3 + x)$
(m) $mn(6 - 7m)$	(n) $11h(g^2 + 2h)$		

Question 4

(a) $x^2(x + 2)$	(b) $x^2(5x - 1)$	(c) $4c(2c^2 + 3)$	(d) $5w^2(2 - 3w)$
(e) $8y^2(4y + 3)$	(f) $3x(4x^3 + 5)$	(g) $4a^2(a^3 - 3)$	(h) $w^7(8w^2 + 1)$

Apply

Question 1
There is no common factor available.

Question 2
$14y - 6$

Question 3
Neither Rebecca nor Victoria have factorised fully. The answer should be $15(y + 2)$

Question 4
Use of a plus sign in the factorised answer, it should be a minus sign.

Question 5
It has not been fully factorised. The answer should be $4x(6x + 5)$

Question 6
Firstly, as $5ac$ has been chosen as a factor, it would only be $4a$ and not $4a^2$
Secondly, it hasn't been factorised completely, it should be $10ac(2a + 3)$