Exercise 2E

Question 19:
$a^3 + a - 3a^2 - 3$
$= a(a^2 + 1) - 3(a^2 + 1)$
$= (a - 3)(a^2 + 1)$

Question 20:
$3ax - 6ay - 8by + 4bx$
$= 3a(x - 2y) + 4b(x - 2y)$
$= (x - 2y)(3a + 4b)$

Question 21:
$abx^2 + a^2x + b^2x + ab$
$= ax(bx + a) + b(bx + a)$
$= (bx + a)(ax + b)$

Question 22:
$x^3 - x^2 + ax + x - a - 1$
$= x^3 - x^2 + ax - a + x - 1$
$= x^2(x - 1) + a(x - 1) + 1(x - 1)$
$= (x - 1)(x^2 + a + 1)$

Question 23:
$2x + 4y - 8xy - 1$
$= 2x - 1 - 8xy + 4y$
$= (2x - 1) - 4y(2x - 1)$
$= (2x - 1)(1 - 4y)$

*********** END *********