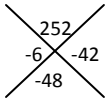
6.4

1) $7x^2 - 48x + 36$

$7x^2 - 6x - 42x + 36$

$x(7x - 6) - 6(7x - 6)$

$(7x - 6)(x - 6)$

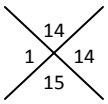


3) $7b^2 + 15b + 2$

$7b^2 + b + 14b + 2$

$b(7b + 1) + 2(7b + 1)$

$(7b + 1)(b + 2)$

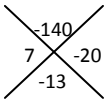


5) $5a^2 - 13a - 28$

$5a^2 + 7a - 20a - 28$

$a(5a + 7) - 4(5a + 7)$

$(5a + 7)(a - 4)$

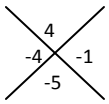


7) $2x^2 - 5x + 2$

$2x^2 - 4x - x + 2$

$2x(x - 2) - 1(x - 2)$

$(x - 2)(2x - 1)$

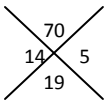


9) $2x^2 + 19x + 35$

$2x^2 + 14x + 5x + 35$

$2x(x + 7) + 5(x + 7)$

$(x + 7)(2x + 5)$

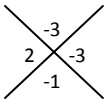


11) $2b^2 - b - 3$

$2b^2 + 2b - 3b - 3$

$2b(b + 1) - 3(b + 1)$

$(b + 1)(2b - 3)$

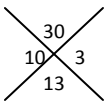


13) $5k^2 + 13k + 6$

$5k^2 + 10k + 3k + 6$

$5k(k + 2) + 3(k + 2)$

$(k + 2)(5k + 3)$

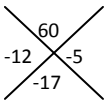


15) $3x^2 - 17x + 20$

$3x^2 - 12x - 5x + 20$

$3x(x - 4) - 5(x - 4)$

$(x - 4)(3x - 5)$

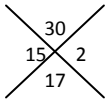


17) $3x^2 + 17xy + 10y^2$

$3x^2 + 15xy + 2xy + 10y^2$

$3x(x + 5y) + 2y(x + 5y)$

$(x + 5y)(3x + 2y)$

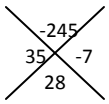


19) $5x^2 + 28xy - 49y^2$

$5x^2 + 35xy - 7xy - 49y^2$

$5x(x + 7y) - 7y(x + 7y)$

$(x + 7y)(5x - 7y)$



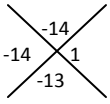
21) $6x^2 - 39x - 21$

$3(2x^2 - 13x - 7)$

$3(2x^2 - 14x + x - 7)$

$3(2x(x - 7) + 1(x - 7))$

$3(x - 7)(2x + 1)$



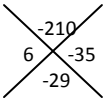
23) $21k^2 - 87k - 90$

$3(7k^2 - 29k - 30)$

$3(7k^2 + 6k - 35k - 30)$

$3(k(7k + 6) - 5(7k + 6))$

$3(7k + 6)(k - 5)$



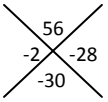
25) $14x^2 - 60x + 16$

$2(7x^2 - 30x + 8)$

$2(7x^2 - 2x - 28x + 8)$

$2\big(x(7x - 2) - 4(7x - 2)\big)$

$2(7x - 2)(x - 4)$

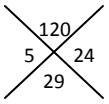


27) $6x^2 + 29x + 20$

$6x^2 + 5x + 24x + 20$

$x(6x + 5) + 4(6x + 5)$

$(6x + 5)(x + 4)$

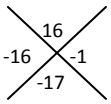


29) $4k^2 - 17k + 4$

$4k^2 - 16k - k + 4$

$4k(k - 4) - 1(k - 4)$

$(k - 4)(4k - 1)$

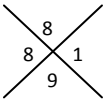


31) $4x^2 + 9xy + 2y^2$

$4x^2 + 8xy + xy + 2y^2$

$4x(x + 2y) + y(x + 2y)$

$(x + 2y)(4 + y)$

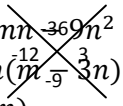


33) $4m^2 - 9mn - 9n^2$

$4m^2 - 12mn + 3mn - 9n^2$

$4m(m - 3n) + 3n(m - 3n)$

$(m - 3n)(4m + 3n)$

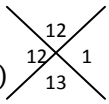


35) $4x^2 + 13xy + 3y^2$

$4x^2 + 12xy + xy + 3y^2$

$4x(x + 3y) + y(x + 3y)$

$(x + 3y)(4x + y)$



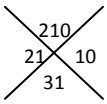
37) $12x^2 + 62xy + 70y^2$

$2(6x^2 + 31xy + 35y^2)$

$2(6x^2 + 21xy + 10xy + 35y^2)$

$2\big(3x(2x + 7y) + 5y(2x + 7y)\big)$

$2(2x + 7y)(3x + 5y)$



39) $24x^2 - 52xy + 8y^2$

$4(6x^2 - 13xy + 2y^2)$

$4(6x^2 - 12xy - xy + 2y^2)$

$4\big(6x(x - 2y) - y(x - 2y)\big)$

$4(x - 2y)(6x - y)$