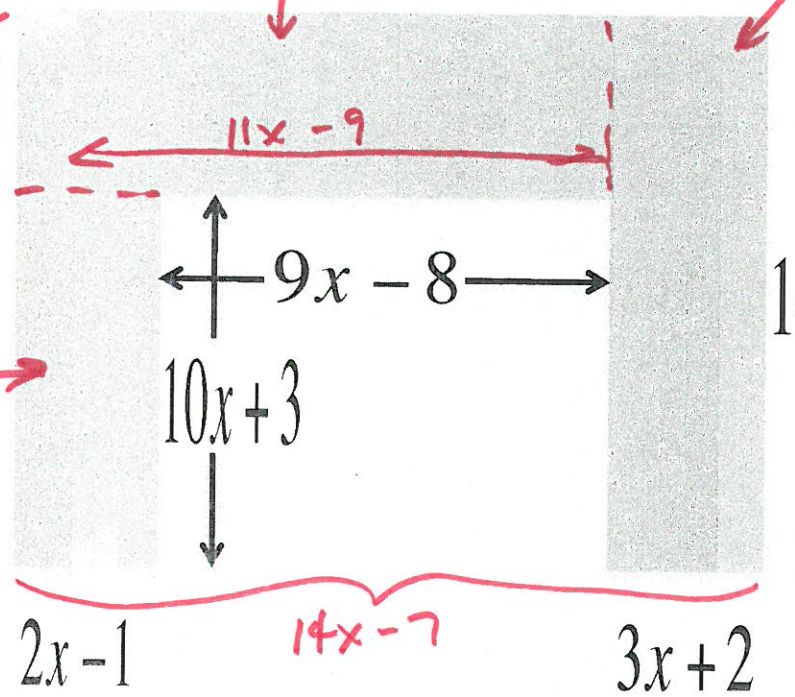
Calculate the perimeter and area.



-32
-63
-95

$A = (11x-9)(4x-7)$
$44x^2 - 113x + 63$

$A = (14x-4)(3x+2)$
$= 42x^2 + 16x - 8$

$(14x-4)-(10x+3)$
$4x - 7$

$A = (2x-1)(10x+3)$
$20x^2 - 4x - 3$

$P = (14x-4) + (14x-7) + (14x-4) + (2x-1) + (10x+3) + (9x-8) + (10x+3) + (3x+2)$

$P = 76x - 16$

Total $= (44x^2 - 113x + 63) + (20x^2 - 4x - 3) + (42x^2 + 16x - 8)$

$A = 106x^2 - 101x + 52$

Factor by grouping.

$(2x^3 - x^2)(-10x + 5)$

$x^2(2x-1) - 5(2x-1)$

$\boxed{(2x-1)(x^2-5)}$

$(xy - 2yz) + (5x - 10z)$

$y(x-2z) + 5(x-2z)$

$\boxed{(x-2z)(y+5)}$

$(-28n^3 - 12n^2)(-21n - 9)$

$-4n^2(7n+3) - 3(7n+3)$

$\boxed{(7n+3)(-4n^2-3)}$

Factor out the GCF

$x^6y^4 - x^3y$

$x^3y(x^3y^3 - 1)$

$28a^4b^2 + 14a^3 - 42a^2b^5$

$14a^2(2a^4b^2 + a - 3b^5)$

$14(x-5) + 3x(x-5)$

$(x-5)(14+3x)$

$7a^3b^2c + 11x^3y^2z$

PRIME

$m(7m+4) - 1(7m+4)$

$(7m-4)(m-1)$

$-144a^9 + 24a^5$

~~24~~

$-24a^5(6a^4 - 1)$

Determine the product of each expression.

$2x(x+6)$

$2x^2+12x$ Quadratic Binomial

$-4m^2y^3(7my^3-11y)$

$-28m^3y^6+44m^2y^4$

$(2k^2+5)(k^3-8k+12)$

$2k^5-16k^3+24k^2+5k^3-40k+60$

$2k^5-11k^3+24k^2-40k+60$

Determine the product of each expression.

$(2x-5)(5x-8)$

$10x^2-41x+40$

$(9y+4)(3y-5)$

$27y^2-33y-20$

$(2x+7y)(10x+5y)$

$20x^2+80xy+35y^2$

Determine the product of each expression. (Special Products)

$$(5xy - 4z)(5xy + 4z)$$

$25x^2y^2 - 16z^2$

$$(9p + 14k)^2$$

$81p^2 + 252kp + 196k^2$

14
9
$2(126) = 252$

$$(-3x^2 - 4y^3)^2$$

$9x^4 + 24x^2y^3 + 16y^6$

Write each polynomial in standard form. Classify the polynomial by degree and number of terms.

a) $2x+6x^2$ $6x^2+2x$ Quadratic Binomial

b) $-5t^2+4t+3t^3$ $3t^3-5t^2+4t$ Cubic Trinomial

c) $-1-p^4$ $-p^4-1$ Quartic Binomial

d) $-8x^0-4$ $= -8(1)-4 = -12$ Constant

Simplify each expression.

$(5x-8)+(7x+10)$

$12x+2$

$(-x^2+5x-6)+(2x^3-10)$

$2x^3-x^2+5x-16$

$(-5w^2+3w)-(-9w^2-6)$

$4w^2+3w+6$

$(-7m-10m^2-12)-(-m^2+7-8m)$

$-9m^2+m-19$