Simplify

1. $3x + 5x - 8y + 4y$ $8x-4y$
2. $5x^2 + 7x - 8x^2 + 7x$ $-3x^2+14x$

Aug 29-7:50 AM

Multiplication -

Monomial

$2a^2 \cdot 4a^3$

$8a^5$

multiply ~~coefficients~~

add the exponents

$4x^2y^5z^3 \cdot 20x^3y^4z^2$

$80x^5y^9z^5$

Aug 29-8:20 AM

Binomial

$3x^2(x^4+4)$

$3x^6+12x^2$

Distributive Property

$(x+4)(x-6)$ - FOIL

first outer inner last

$x^2-6x+4x-24$

$\boxed{x^2-2x-24}$

Aug 29-8:25 AM

Trinomial

$3a^2(2a^2+4a-6)$

Distributive Property

$6a^4+12a^3-18a^2$

Aug 29-8:28 AM

Binomial · Trinomial

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

$x^3-4x^2+3x+2x^2-8x+6$

x^3-2x^2-5x+6

polynomial

Aug 29-8:31 AM

Tri · Tri

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

$x^4+3x^3-4x^2+x^3+3x^2-4x-2x^2-6x+8$

$x^4+4x^3-3x^2-10x+8$

$-4x^2+3x^2-2x^2$

Aug 29-8:34 AM

$$\begin{array}{r} 3a+4b \\ +\ -6a+5b \\ \hline -3a+9b \end{array}$$

Aug 29-8:47 AM

$(x+7)^2$

$(x+7)(x+7)$

Aug 29-8:51 AM

Multiply

Monomial

$(2a^2)(4a^4)$

$8a^6$

$(4x^2y^4)(7x^3y^2)$

$28x^5y^6$

* Multiply the coefficients
* Add the exponents

Aug 29-9:49 AM

Binomial

Mon · Binom

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

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

Binom · Binom

$(x+4)(x-6)$

$x^2-6x+4x-24$

$x^2-2x-24$

* Distributive Property
* FOIL
  First, Outside, Inside, Last

Aug 29-9:55 AM

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

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

polynomial

Aug 29-10:00 AM

Trinomial – Distributive

mon · tri

$3x(5x^2+4x-2)$

$15x^3+12x^2-6x$

Binom · tri

$(x+2)(x^2+4x-5)$

$x^3+4x^2-5x+2x^2+8x-10$

$\boxed{x^3+6x^2+3x-10}$

Aug 29-10:05 AM

Tri · Tri

$(x^2+4x+3)(x^2-2x+1)$

$x^4-2x^3+x^2+4x^3-8x^2+4x+3x^2-6x+3$

$x^4+2x^3-4x^2-2x+3$

Aug 29-10:08 AM

$+ \quad \div$

Aug 29-10:22 AM

12. $(x+7)^2$

$(x+7)(x+7)$

$\cancel{x^2+49}$

$A = l \cdot w$

$(\quad x \quad)$

Aug 29-10:22 AM

Write the equations for the sales.

1. The sales of digital cameras is seven times the number of months plus 137. $D = 7m+137$

2. The sales of cell phones is four times the number of months plus 78.

$C = 4m+78$

Aug 29-10:44 AM

$D = 7m+137 \qquad 7(10)+137 = 207$

$C = 4m+78 \qquad 4(10)+78 = 118$

$T = D + C$

$T = 11m+215$

Predict the number sold in 10 months.

$T = 11(10)+215$

$T = 325$ cell/cameras

Aug 29-10:50 AM

Bodyboards, which are used to ride waves, are made of foam and are more rectangular than surfboards. A bodyboard's dimensions are determined by the height and skill level of the user. $(h-32)$

$(\frac{1}{2}h+11)$

The length of Ann's bodyboard should be Ann's height h minus 32. The board's width should be half of Ann's height plus 11 inches. Find the area of the bodyboard.

Aug 29-10:47 AM

$A = l \cdot w$

$(h-32)(\frac{1}{2}h+11)$

Aug 29-10:58 AM