Distributive Property

<mark>a*x + a*y = a*(x + y) ← Factor, or Undistribute, or Create Parenthesis</mark>

<mark>a*(x + y) = a*x + a*y ← Distribute, or Expand, or Open Parenthesis</mark>

Distribute and combine like monomials

C1 $\quad a^5 * (3*a^3 + 5*a^2)$

C2 $\quad (a^5 + 5)* (3*a^3 + 5*a^2)$

C3 $\quad (a^5 - 5)* (3*a^3 + 5*a^2)$

C4 $\quad (a^5 - 5)* (3*a^3 - 5*a^2)$

C5 (a - b)* (a + b) =   (Difference of Squares Identity, we talked about in class)

Factor

F1 $a * y^2 * x + a*y^2$

F2 $a^2 - a*b^2$

F3 $18 * a - 27 * a * b^2$

F4 $X^2 - Y^2 =$
(The same Difference of Squares Identity, we talked about in class)

W1 Originally, a camera was priced at $1400.00. After the discount it was 1200 dollars. What Is percentage of the discount?

W1.A Originally, a camera was priced at $1400.00. After the discount it was N dollars. What Is percentage of the discount in terms of N?

W2 Originally, a camera was priced at N dollars. After 16% discount it was 200 dollars. How much is N?

W3 Mike folded a square sheet of paper vertically in 4 equal rectangles. Each of the 4 rectangles has perimeter of 16 inches. What is the area of the original square measured in square feet?

W4 The sum of three consecutive integer numbers is 222. What is the smallest of the three numbers?

W5 The sum of three consecutive integer numbers is 369. What is the greatest of the three numbers?

Solve equations

E1 $5*x/8 = -2/5$

E2 $5/(x*8) = -2/5$

E3 $3*x / 7 - 2*x / 9 = 13$

E4 $3*(x + 2) / 7 - 2*(x + 2) / 9 = 13$

E5 $3*(2*x + 3) / 7 - 2*(2*x + 3) / 9 = 13$

E6 $(x + 2)^2 = 1.21$