FACTORING POLYNOMIALS - Day 1

Factoring is the ______ of multiplication.

Find the product:

$$(x + 2)(x + 5) =$$

$$x^2 + 7x + 10 =$$

Steps for factoring a trinomial:

- 1) Factor out the greatest common factor, GCF.
- 2) Identify the sum (S) and product (P) from the terms that remain.
- 3) Find the factors of the product that add up to the sum.

S =

P =

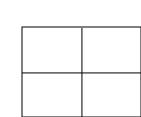
- 4) Organize terms in a 2x2 box.
- 5) Factor out the GCF from the first row, and then fill in missing factors.

Note: Don't forget to include the GCF from the first step in your final answer!

Factor the following trinomials completely.

1.
$$6x^2 + 17x + 5 =$$

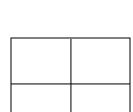
2.
$$2x^2 - 16x + 32 =$$



3.
$$9x^2 + 3x - 12 =$$

4.
$$x^2 + 2x + 1 =$$





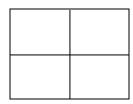
S =

P =

5.	$6x^3 - 14x^2 - 12x =$	

6. $2x^2 - 2x - 24 =$





7. Which expression is equivalent to $2x^2 + 7x - 4$?

A.
$$(2x+1)(x-4)$$

B.
$$(2x+1)(x+4)$$

C.
$$(2x-1)(x+4)$$

D.
$$(2x-1)(x-4)$$