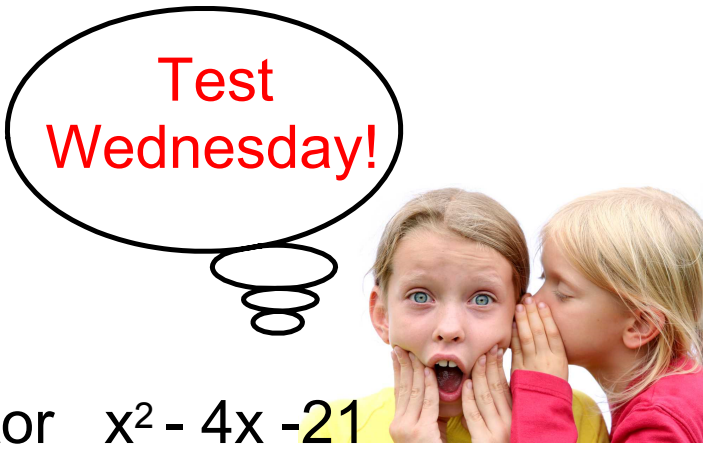


1. Factor $x^2 - 4x - 21$
2. Factor $12x^2y^5 - 30x^5y^3 + 42xy^2z$
3. Factor $36x^4 - 49$
4. Factor $5n^2 + 6n - 8$
5. Simplify $(3x - 2)(5x - 2)$

Factor $x^2 - 4x - 21$

$3 \times -7 = -21$ (Diff)

$3 + -7 = -4$ (Big −)

$= (x+3)(x-7)$

1×-21

3×-7

2. Factor $12x^2y^5 - 30x^5y^3 + 42xy^2z$

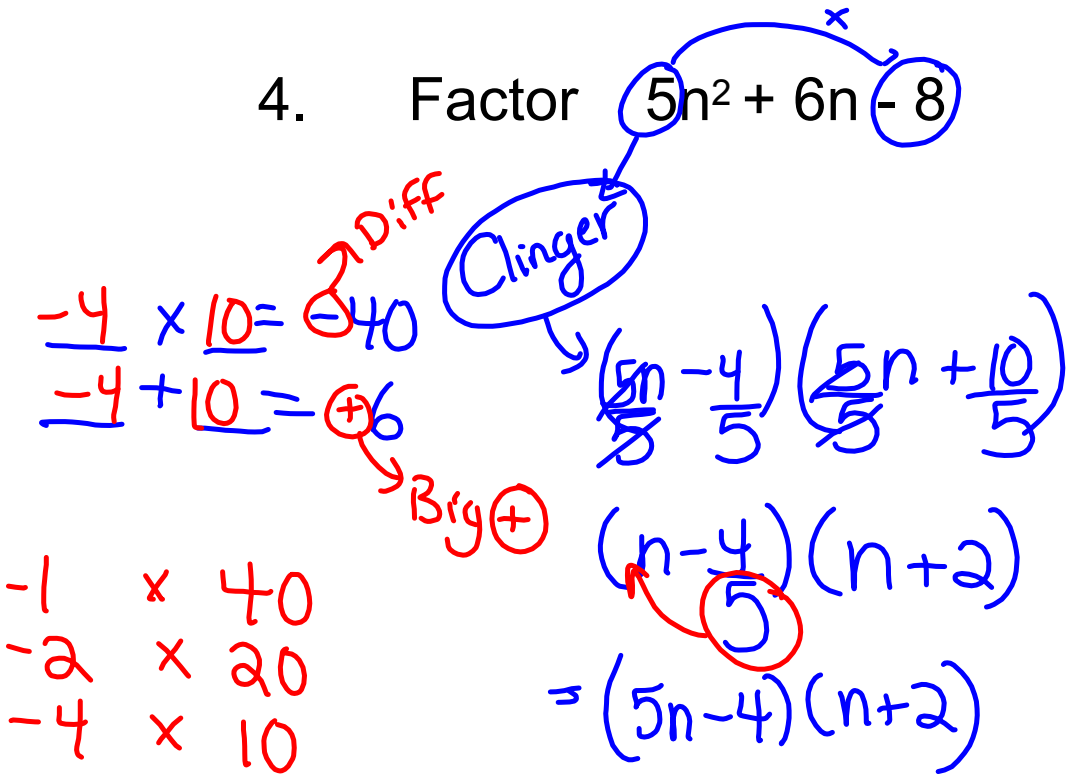
$= 6xy^2(2xy^3 - 5x^4y + 7z)$

3. Factor $36x^4 - 49$ $\div 2$

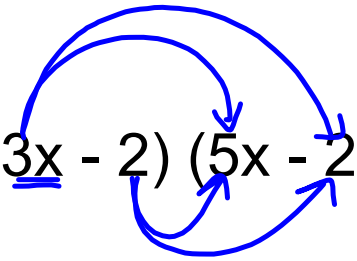
$$(6x^2)^2 - (7)^2$$

$$= (6x^2 + 7)(6x^2 - 7)$$

4. Factor $5n^2 + 6n - 8$



5. Simplify $(3x - 2)(5x - 2)$



$15x^2 - 6x - 10x + 4$

$= 15x^2 - 16x + 4$