

$$(x+2)(x-2)(x-6)$$

$$= (x+2) [(x+2)(x-6)]$$

$$= (x+2) [x^2 - 6x + 2x - 12]$$

$$= (x+2) [x^2 - 4x - 12]$$

$$= x^3 - 4x^2 - 12x + 2x^2 - 8x - 24$$

$$= x^3 - 2x^2 - 20x - 24$$