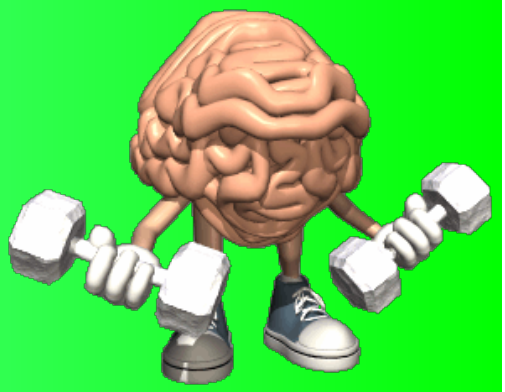
Warm Up

Expand and Simplify

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

Warm Up



Expand and Simplify

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

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

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

$(x^2-3x-3x+9)(x-3) - (x^2+2x+2x+4)$

$(x^2-6x+9)(x-3) - x^2-4x-4$

$x^3-3x^2-6x^2+18x+9x-27-x^2-4x-4$

$$x^3-10x^2+23x-31$$

Quiz tomorrow on
Oct. 12th

- Prime factorization

Example: Prime factorization of 560

- Greatest Common Factor

Example: 56, 72

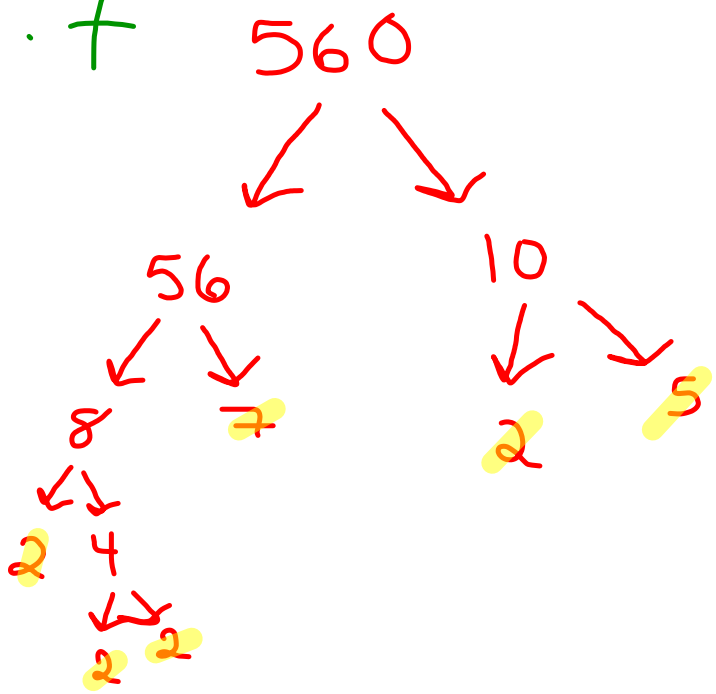
Example: $(3xy + 6x^2y^3 - 24x)$

- Multiplying polynomials

Example: $(2x-7)(5x+3)^2$

Example: Prime factorization of 560

$2^4 \cdot 5 \cdot 7$



$2^4 \times 7 \times 5$

Prime factor

2, 7, 5

- Greatest Common Factor

Example: 56, 72

56

1 , 56

2 , 28

4 , 14

7 , 8

72

1, 72

2, 36

3, 24

4, 18

6, 12

8, 9

GCF = 8

Factor 8

Example: $(3xy + 6x^2y^3 - 24x)$

$3x(y + 2xy^3 - 8)$

- Multiplying polynomials

Example: $(2x-7)(5x+3)^2$

$(2x-7)(25x^2+30x+9)$

$50x^3+60x^2+18x-175x^2-210x-63$

$50x^3-115x^2-192x-63$

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Questions 9cd, 15ce, 18c, 21c

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Question 1ace, 2ab, 4ac

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Questions 6(a), 10, 14, 15b, 16

Worksheet on expanding

Quiz Tomorrow