

11 and  $-11$

Find the product of  $3x + 1$  and  $8x - 3$

$$24x^2 - x - 3$$

Find the product of  $2x^2 - 4x - 5$  and  $3x + 6$

$$6x^3 - 39x - 30$$

Factor the expression  $x^4 - 100$

$$(x^2 + 10)(x^2 - 10)$$

Factor the expression  $x^4 + 5x^2 - 150$

$$(x^2 + 15)(x^2 - 10)$$

If  $A = 2x^2 + x - 1$  and  $B = 9 - x$ ,  
find the product of  $A$  and  $B$

$$-2x^3 + 17x^2 + 10x - 9$$

Find the zeros of  $x^2 - 28x - 60$

$-2$  and  $30$

Find the zeros of  $3x^2 - 88x - 60$

$$-\frac{2}{3} \text{ and } 30$$

How many possible integers for  $b$  exist  
where  $x^2 + bx + 28$  can be written in factored form?



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Rewrite in factored form.  
Make sure to factor as much as possible:

$$x^4 - 81$$

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

Rewrite in factored form:  $x^8 - 1$   
Factor as much as possible

$$(x^4 + 1)(x^2 + 1)(x + 1)(x - 1)$$

Find the zeros  $x^2 - 121$

