

Unit 2.3 Notes

Knowing which signs to put in the ()'s

$$\underline{\quad}x^2 + \underline{\quad}x + \underline{\quad} \rightarrow (\underline{\quad} + \underline{\quad})(\underline{\quad} + \underline{\quad})$$

1st positive and 2nd positive gives \rightarrow two positives

$$\underline{\quad}x^2 - \underline{\quad}x + \underline{\quad} \rightarrow (\underline{\quad} - \underline{\quad})(\underline{\quad} - \underline{\quad})$$

1st negative and 2nd positive gives \rightarrow two negatives

$$\underline{\quad}x^2 + \underline{\quad}x - \underline{\quad} \rightarrow (\underline{\quad} + \underline{\quad})(\underline{\quad} - \underline{\quad})$$

1st positive and 2nd negative gives \rightarrow one positive and one negative

$$\underline{\quad}x^2 - \underline{\quad}x - \underline{\quad} \rightarrow (\underline{\quad} + \underline{\quad})(\underline{\quad} - \underline{\quad})$$

1st negative and 2nd negative gives \rightarrow one positive and one negative

Unit 2.8 Difference of Squares Notes

$$a^2 - b^2 = (a + b)(a - b)$$

Unit 2.9 Sum and Difference of Cubes Notes

$$a^3 + b^3 = (a + b)(a^2 - ab + b^2)$$

$$a^3 - b^3 = (a - b)(a^2 + ab + b^2)$$