

# Math 1513 - College Algebra

## Written Assignment 5 - Due 2020.02.16

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Directions: Please answer the following question in complete sentences and show ALL work. Be sure to label all geometric objects in any illustrations. I will accept an answer in a scanned image format, as a pdf, or sent from your awesome picture phone. Do **NOT** submit work in Microsoft Word document format. Be sure to submit your work through BlackBoard.

For what value of  $a$  will five of the six real roots of the polynomial  $24x^6 - 14x^5 - 93x^4 + 58x^3 + 84x^2 + ax - 15$  be shared by the polynomial  $6x^5 - 5x^4 - 22x^3 + 20x^2 + 16x - 15$ ?