

ACMAT100 Fall 2023  
Professor Manguba-Glover  
Homework 14 (5.8)

Name: \_\_\_\_\_

Show all work and simplify all answers before circling/boxing them. If you do the problem incorrectly, or don't show sufficient work, you will be asked to rewrite the problem for credit.

Final due date: the day of the Unit 4 Exam.

Solve the following:

(1)  $5x^2 = 20x$

(8)  $x^3 - 4x^2 = 21x$

(2)  $x^2 + 3x - 40 = 0$

(9)  $x^2 = 4x - 4$

(3)  $x^2 + 10x = -16$

(10)  $16x^2 = 9$

(4)  $9y^2 = -4y + 4$

(11)  $2x^3 - 18x = 0$

(5)  $3r^2 + 2r = 21$

(12)  $-2x - 15 = -x^2$

(6)  $2x^2 - 10x - 28 = 0$

(13)  $6x^2 - 14 - 3x = 22x - 38$

(7)  $y^3 - 2y^2 - 8y = 0$