ACMAT117 Fall 2025

Professor Manguba-Glover

Sections 4.8 Classwork (CW 19)

Name:

Complete as many of the following problems as you can. You do not have to go in order.

- (1) Simplify $\sqrt{2}^{1/2} \cdot \sqrt{2}^{3/2}$
- (2) Simplify $64^{2/3}$
- (3) Simplify $(-32x^5y^{10})^{1/5}$
- (4) Solve $x^{3/4} = 8$
- (5) Solve $x^{5/4} + 36 = 4$
- (6) Solve $\sqrt{3x+1} = 4$
- (7) Solve $\sqrt{x-3} = x 5$
- (8) Solve $2\sqrt{2x+5} x = 4$
- (9) Solve $\sqrt[3]{4x^2+7}-2=0$
- (10) Solve $\sqrt{x+2} \sqrt{x} = 1$

Key:

- (1) 2
- $(3) -2xy^2$
- (5) 16
- (7) 7
- $(9) -\frac{1}{2}, \frac{1}{6}$

- (2) 16
- (4) 16
- (6) 5
- (8) -2, 2
- $(10) \frac{1}{4}$