

# Math 233 - Quiz 3

September 3, 2026

Name \_\_\_\_\_

Score \_\_\_\_\_

Show all work to receive full credit. Supply explanations when necessary.

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1. (4 points) Find the area of triangle  $ABC$ .

$$A(1, 4, -2), \quad B(2, 2, 5), \quad C(-3, 1, 4)$$

2. (3 points) Find parametric and symmetric equations for the line through  $P(7, -2, 4)$  and  $Q(9, 3, 6)$ .

3. (3 points) Determine the angle between the two planes given below. Write your answer in degrees rounded to the nearest tenth.

$$P_1 : \quad 3x - 7y + z = 10$$

$$P_2 : \quad 2x + 3y - 6z = 0$$