Math 233 - Quiz 3

Name _____

February 5, 2026

Score _____

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

1. (7 points) Consider the triangle with vertices at the points $A(2, 4, -2)$, $B(1, 1, 3)$, and $C(-3, 3, -1)$.

    (a) Find the area of $\triangle ABC$.

    (b) Find an equation of the plane passing through the points A, B, and C.

    (c) Find parametric and symmetric equations of the line through points A and B.

2. (3 points) Find the measure of the angle between the planes $3x - 2y + z = 4$ and $x + 8y + 2z = 0$. Write your final answer in degrees rounded to the nearest tenth.