NAME:

ID:

Problem 1. Find the following integrals:

$$\bullet \int (3-4x)^{\sqrt{2}} dx$$

•
$$\int \sec(3x)\tan(3x) dx$$

•
$$\int csch^2(3x) dx$$

$$\bullet \int \frac{dx}{\sqrt{2-x^2}}$$

•
$$\int \sec(1-x) dx$$

Problem 2. Find the distance travelled by a particle moving with velocity $v(t) = \frac{1}{t^2 + 2t + 4}$ over the time period [-1, 0].