

1. (20 points) Evaluate each of the following:

a.  $\int \frac{x}{\sqrt{9-x^2}} dx$

b.  $\int \frac{5x-14}{x^2-6x+8} dx$

c.  $\int \frac{4x^2-x+12}{(x-2)(x^2+9)} dx$