Directions: Work with your group to find these anti-derivatives. Think carefully about what technique(s) to use. If there are multiple ways to find the anti-derivative ask yourself which is easier.

$$1. \int \frac{x}{\sqrt{1-x^2}} \, dx$$

$$2. \int \frac{x^2}{\sqrt{1-x^2}} \, dx$$

$$3. \int \frac{2x-3}{x(x-3)} \, dx$$

$$4. \int \frac{\ln(x+1)}{x^2} \, dx$$

$$5. \int \frac{1}{(x-2)(x^2+4)} \, dx$$

$$6. \int \frac{1}{x\sqrt{4x+1}} \, dx$$