Trigonometric waves can model real life situations from the hours of sunlight to audio signals.

The integral of sin x is negative cos x plus c, and the integral of cos x is sin x plus c.

Integrate three sin x subtract half $\cos x \, dx$.

Sin x integrates to become negative cos x plus c, so three sin x becomes negative three cos x plus c.

Cos x integrates to be sin x plus c, so a half cos x becomes a half sin x plus c.

The integrated function then becomes negative three cos x plus a half sin x plus c.

Remember, the integrals are given on the formula sheet and use plus c for the constant when no values for the integral are given.