

Warm up:

Find the anti-derivative for the following:

a.) x^4

b.) $3x^4$

c.) $\frac{1}{x}$

d.) $9x^2 + 3$

e.) $\frac{1}{x^2}$

f.) e^x

g.) e^{7x}

h.) \sqrt{x}

i.) $\sqrt{e^x}$

j.) $4x^2 - x^{-5} + e^x - 101$

k.) $\cos x$

g.) What is the anti-derivative function for $a(t)$ if $a(t)$ is the acceleration over time?

j.) Find the area underneath the curve of e^{-2x} from -1 to 4. Check your answer with a calculator.