

Brock Adams

P.366
#48

minimum value = m
maximum value = M

Between what two values must
 $\int_0^2 f(x) dx$ lie?

Which Property
allows to make
decision

SO $\int_a^b c dx = c(b-a)$ where c 's
Any constant

Property 7 gives

$$\int_a^b m dx \leq \int_a^b f(x) dx \leq \int_a^b M dx$$

$$m(b-a) \leq \int_a^b f(x) dx \leq M(b-a)$$

$$m(2-0) \leq \int_0^2 f(x) dx \leq M(2-0)$$

must lie between $m(2)$ and $M(2)$

