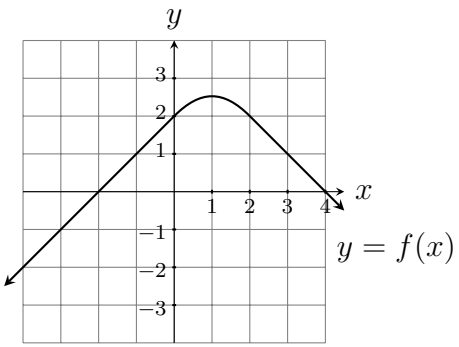
Name: _____

Quiz 23

MATH 200
April 21, 2022

1. Answer the questions about the function $f(x)$ graphed below.



(a) $\displaystyle\int_{-2}^{0} f(x)\,dx =$

(b) $\displaystyle\int_{0}^{-2} f(x)\,dx =$

(c) $\displaystyle\int_{-4}^{-1} f(x)\,dx =$

(d) Suppose $\displaystyle\int_{0}^{2} f(x)\,dx = 4.7$. Find $\displaystyle\int_{-2}^{2} f(x)\,dx$.

(e) $\displaystyle\lim_{n\to\infty}\sum_{k=1}^{n} f\left(2+\frac{2k}{n}\right)\frac{2}{n} =$

2. Suppose for functions f and g we have: $\displaystyle\int_{1}^{4} f(x)\,dx = 1$, $\displaystyle\int_{4}^{6} f(x)\,dx = 3$, $\displaystyle\int_{1}^{6} g(x)\,dx = 4$.

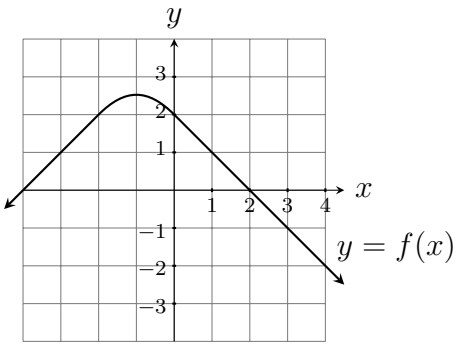
Find $\displaystyle\int_{1}^{6} \big(f(x)+2g(x)\big)\,dx$

Name: _____

Quiz 23

MATH 200
April 21, 2022

1. Answer the questions about the function $f(x)$ graphed below.



(a) $\displaystyle\int_1^4 f(x)\,dx =$

(b) $\displaystyle\int_4^1 f(x)\,dx =$

(c) $\displaystyle\int_0^2 f(x)\,dx =$

(d) Suppose $\displaystyle\int_{-2}^0 f(x)\,dx = 4.7$. Find $\displaystyle\int_{-2}^2 f(x)\,dx$.

(e) $\displaystyle\lim_{n\to\infty}\sum_{k=1}^{n} f\left(\frac{2k}{n}\right)\frac{2}{n} =$

2. Suppose for functions f and g we have: $\displaystyle\int_1^4 f(x)\,dx = -1$, $\displaystyle\int_4^6 f(x)\,dx = 2$, $\displaystyle\int_1^6 g(x)\,dx = 3$.

Find $\displaystyle\int_1^6 \big(f(x) + 5g(x)\big)\,dx$