

1. (6pts) Graph the function  $f(x) = x + 1$  and use the graph to find  $\int_{-3}^2 f(x)dx$ .

2. (2pts) Write the limit definition of  $\int_a^b f(x)dx$ .

3. (2pts) If  $\int_2^3 f(x)dx = 4$ ,  $\int_3^7 f(x)dx = 2$ , and  $\int_2^7 g(x)dx = -3$ . Find  $\int_2^7 (3f(x) + g(x)) dx$ .