## Lesson 1.4 - Integrals of Constant Functions

1. Find the family of antiderivatives of each constant function.
(a) $y=m$
(b) $y=-9$
(c) $y=0.23$
2. Use the Fundamental Theorem of Calculus to evaluate each definite integral.
(a) $\int_{a}^{b} m d x$
(b) $\int_{2}^{5}-6 d x$
(c) $\int_{-1 / 2}^{1} 4.2 d x$
3. Stan saves money by stashing $\$ 50$ per week under his mattress.
(a) Write a definite integral that represents Stan's total accumulation of savings between the second and tenth weeks.
(b) Use the Fundamental Theorem of Calculus to evaluate the integral from part (a), and interpret your answer in context.
