

## Math 220 - Calculus f. Business and Management - Worksheet 35

### Worksheet 35 - Definite Integrals

Solve these definite integrals by use of the power rule

$$1: \int_1^4 t^3 dt$$

$$2: \int_1^6 5^{-1/2} dx$$

$$3: \int_1^3 \frac{1}{x} dx$$

$$4: \int_{-2}^8 4e^{3t} dt$$

Solve these definite integrals using substitution

$$5: \int_2^5 x \cdot \sqrt[3]{x^2 + 4} dx$$

$$6: \int_2^5 3te^{t^2+1} dt$$

$$7: \int_1^4 \frac{\ln(x)}{x} dx$$

Solve these definite integrals with partial integration

$$8: \int_2^5 3te^{5t} dt$$

$$9: \int_1^4 \frac{\ln(x)}{x^3} dx$$