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1. $\int_0^1 x^2 dx = \frac{1}{3}$ (The area under the curve $y=x^2$ from $x=0$ to $x=1$ is $\frac{1}{3}$.)
 2. $\int_1^2 \frac{1}{x} dx = \ln 2$ (The area under the curve $y=1/x$ from $x=1$ to $x=2$ is $\ln 2$.)
 3. $\int_0^1 (x^2 + 1) dx = \frac{1}{3} + 1 = \frac{4}{3}$ (The area under the curve $y=x^2+1$ from $x=0$ to $x=1$ is $\frac{4}{3}$.)
 4. $\int_1^2 (x^2 + 1) dx = \frac{8}{3} + 1 = \frac{11}{3}$ (The area under the curve $y=x^2+1$ from $x=1$ to $x=2$ is $\frac{11}{3}$.)
 5. $\int_0^1 (x^2 + 1) dx = \frac{1}{3} + 1 = \frac{4}{3}$ (The area under the curve $y=x^2+1$ from $x=0$ to $x=1$ is $\frac{4}{3}$.)

6. $\int_0^1 x^3 dx = \frac{1}{4}$ (The area under the curve $y=x^3$ from $x=0$ to $x=1$ is $\frac{1}{4}$.)
 7. $\int_1^2 \frac{1}{x^2} dx = \frac{3}{4}$ (The area under the curve $y=1/x^2$ from $x=1$ to $x=2$ is $\frac{3}{4}$.)
 8. $\int_0^1 (x^3 + 1) dx = \frac{1}{4} + 1 = \frac{5}{4}$ (The area under the curve $y=x^3+1$ from $x=0$ to $x=1$ is $\frac{5}{4}$.)
 9. $\int_1^2 (x^3 + 1) dx = \frac{17}{4} + 1 = \frac{21}{4}$ (The area under the curve $y=x^3+1$ from $x=1$ to $x=2$ is $\frac{21}{4}$.)
 10. $\int_0^1 (x^3 + 1) dx = \frac{1}{4} + 1 = \frac{5}{4}$ (The area under the curve $y=x^3+1$ from $x=0$ to $x=1$ is $\frac{5}{4}$.)

11. $\int_0^1 x^4 dx = \frac{1}{5}$ (The area under the curve $y=x^4$ from $x=0$ to $x=1$ is $\frac{1}{5}$.)
 12. $\int_1^2 \frac{1}{x^3} dx = \frac{7}{8}$ (The area under the curve $y=1/x^3$ from $x=1$ to $x=2$ is $\frac{7}{8}$.)
 13. $\int_0^1 (x^4 + 1) dx = \frac{1}{5} + 1 = \frac{6}{5}$ (The area under the curve $y=x^4+1$ from $x=0$ to $x=1$ is $\frac{6}{5}$.)
 14. $\int_1^2 (x^4 + 1) dx = \frac{17}{5} + 1 = \frac{22}{5}$ (The area under the curve $y=x^4+1$ from $x=1$ to $x=2$ is $\frac{22}{5}$.)
 15. $\int_0^1 (x^4 + 1) dx = \frac{1}{5} + 1 = \frac{6}{5}$ (The area under the curve $y=x^4+1$ from $x=0$ to $x=1$ is $\frac{6}{5}$.)

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- $\int_0^1 x^5 dx = \frac{1}{6}$ (The area under the curve $y=x^5$ from $x=0$ to $x=1$ is $\frac{1}{6}$.)
- $\int_1^2 \frac{1}{x^4} dx = \frac{15}{8}$ (The area under the curve $y=1/x^4$ from $x=1$ to $x=2$ is $\frac{15}{8}$.)

