Name : _____ Score : _____

Teacher : _____ Date : _____

Power Rule for Integration

Find the indefinite integral of each function.

1) $\int (3x^2 - 12x)dx$

2) $\int \left(\frac{-14}{x^2}\right)dx$

3) $\int (-4x^3 + 12x^2)dx$

4) $\int (2x + 4)dx$

5) $\int \left(\frac{-22}{49x^{\frac{11}{7}}}\right)dx$

6) $\int \left(\frac{2}{5x^{\frac{5}{9}}}\right)dx$

7) $\int \left(\frac{98}{x^8}\right)dx$

8) $\int \left(\frac{9}{52x^{\frac{5}{8}}}\right)dx$

9) $\int \left(\frac{11}{108x^{\frac{10}{9}}}\right)dx$

10) $\int \left(\frac{16}{x^9}\right)dx$

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Power Rule for Integration

Find the indefinite integral of each function.

1) $\int (3x^2 - 12x)dx$

$x^3 - 6x^2 + C$

2) $\int \left(\frac{-14}{x^2}\right)dx$

$\frac{14}{x} + C$

3) $\int (-4x^3 + 12x^2)dx$

$-x^4 + 4x^3 + C$

4) $\int (2x + 4)dx$

$x^2 + 4x + C$

5) $\int \left(\frac{-22}{49x^{\frac{11}{7}}}\right)dx$

$\frac{11}{14}x^{\frac{-4}{7}} + C$

6) $\int \left(\frac{2}{5x^{\frac{5}{9}}}\right)dx$

$\frac{9}{10}x^{\frac{4}{9}} + C$

7) $\int \left(\frac{98}{x^8}\right)dx$

$\frac{-14}{x^7} + C$

8) $\int \left(\frac{9}{52x^{\frac{5}{8}}}\right)dx$

$\frac{6}{13}x^{\frac{3}{8}} + C$

9) $\int \left(\frac{11}{108x^{\frac{10}{9}}}\right)dx$

$\frac{-11}{12}x^{\frac{-1}{9}} + C$

10) $\int \left(\frac{16}{x^9}\right)dx$

$\frac{-2}{x^8} + C$