

Name: _____

Calculus

Derivative Progression B: Power Rule: decimals, fractions, negative exponents.

Find the derivative of each function ($\frac{dy}{dx}$)

1) $y = 10$

9) $y = x^{\frac{1}{2}}$

2) $y = x^5 + 10$

10) $y = x^{0.5}$

3) $y = \pi$

11) $y = \sqrt{x}$

4) $y = 4.7x^3 - 3.2x$

12) $y = \frac{1}{x^2}$

5) $y = x^{3.2}$

13) $y = \frac{1}{\sqrt{x}}$

6) $y = x^{-2}$

14) $y = \sqrt[3]{x}$

7) $y = x^{-2.5}$

15) $y = \frac{1}{x} - \sqrt[5]{x^7} + x^{0.63}$

8) $y = x^{\frac{3}{2}}$

16) $y = \frac{1}{x^n} + \sqrt[p]{x^Q}$