





9.  $\frac{1}{x} = x^{-1}$  ,  $\frac{d}{dx} x^{-1} = -1 x^{-2} = -\frac{1}{x^2}$  .
10.  $\frac{d}{dx} \frac{1}{x^2} = \frac{d}{dx} x^{-2} = -2 x^{-3} = -\frac{2}{x^3}$  .
11.  $\frac{d}{dx} \frac{1}{x^3} = \frac{d}{dx} x^{-3} = -3 x^{-4} = -\frac{3}{x^4}$  .
12.  $\frac{d}{dx} \frac{1}{x^4} = \frac{d}{dx} x^{-4} = -4 x^{-5} = -\frac{4}{x^5}$  .

5.  $\frac{d}{dx} \frac{1}{x^5} = \frac{d}{dx} x^{-5} = -5 x^{-6} = -\frac{5}{x^6}$  .

1.  $\frac{d}{dx} \frac{1}{x^3} = \frac{d}{dx} x^{-3} = -3 x^{-4} = -\frac{3}{x^4}$  .
2.  $\frac{d}{dx} \frac{1}{x^4} = \frac{d}{dx} x^{-4} = -4 x^{-5} = -\frac{4}{x^5}$  .
1.  $\frac{d}{dx} \frac{1}{x^5} = \frac{d}{dx} x^{-5} = -5 x^{-6} = -\frac{5}{x^6}$  .
2.  $\frac{d}{dx} \frac{1}{x^6} = \frac{d}{dx} x^{-6} = -6 x^{-7} = -\frac{6}{x^7}$  .
3.  $\frac{d}{dx} \frac{1}{x^7} = \frac{d}{dx} x^{-7} = -7 x^{-8} = -\frac{7}{x^8}$  .
3.  $\frac{d}{dx} \frac{1}{x^8} = \frac{d}{dx} x^{-8} = -8 x^{-9} = -\frac{8}{x^9}$  .
4.  $\frac{d}{dx} \frac{1}{x^9} = \frac{d}{dx} x^{-9} = -9 x^{-10} = -\frac{9}{x^{10}}$  .
5.  $\frac{d}{dx} \frac{1}{x^{10}} = \frac{d}{dx} x^{-10} = -10 x^{-11} = -\frac{10}{x^{11}}$  .
6.  $\frac{d}{dx} \frac{1}{x^{11}} = \frac{d}{dx} x^{-11} = -11 x^{-12} = -\frac{11}{x^{12}}$  .

6.  $\frac{d}{dx} \frac{1}{x^{12}} = \frac{d}{dx} x^{-12} = -12 x^{-13} = -\frac{12}{x^{13}}$  .

1.  $\frac{d}{dx} \frac{1}{x^{13}} = \frac{d}{dx} x^{-13} = -13 x^{-14} = -\frac{13}{x^{14}}$  .
2.  $\frac{d}{dx} \frac{1}{x^{14}} = \frac{d}{dx} x^{-14} = -14 x^{-15} = -\frac{14}{x^{15}}$  .
3.  $\frac{d}{dx} \frac{1}{x^{15}} = \frac{d}{dx} x^{-15} = -15 x^{-16} = -\frac{15}{x^{16}}$  .
4.  $\frac{d}{dx} \frac{1}{x^{16}} = \frac{d}{dx} x^{-16} = -16 x^{-17} = -\frac{16}{x^{17}}$  .
5.  $\frac{d}{dx} \frac{1}{x^{17}} = \frac{d}{dx} x^{-17} = -17 x^{-18} = -\frac{17}{x^{18}}$  .
6.  $\frac{d}{dx} \frac{1}{x^{18}} = \frac{d}{dx} x^{-18} = -18 x^{-19} = -\frac{18}{x^{19}}$  .
7.  $\frac{d}{dx} \frac{1}{x^{19}} = \frac{d}{dx} x^{-19} = -19 x^{-20} = -\frac{19}{x^{20}}$  .
8.  $\frac{d}{dx} \frac{1}{x^{20}} = \frac{d}{dx} x^{-20} = -20 x^{-21} = -\frac{20}{x^{21}}$  .

7.  $\frac{d}{dx} \frac{1}{x^{21}} = \frac{d}{dx} x^{-21} = -21 x^{-22} = -\frac{21}{x^{22}}$  .

1.  $\frac{d}{dx} \frac{1}{x^{22}} = \frac{d}{dx} x^{-22} = -22 x^{-23} = -\frac{22}{x^{23}}$  .
1.  $\frac{d}{dx} \frac{1}{x^{23}} = \frac{d}{dx} x^{-23} = -23 x^{-24} = -\frac{23}{x^{24}}$  .
2.  $\frac{d}{dx} \frac{1}{x^{24}} = \frac{d}{dx} x^{-24} = -24 x^{-25} = -\frac{24}{x^{25}}$  .
3.  $\frac{d}{dx} \frac{1}{x^{25}} = \frac{d}{dx} x^{-25} = -25 x^{-26} = -\frac{25}{x^{26}}$  .
4.  $\frac{d}{dx} \frac{1}{x^{26}} = \frac{d}{dx} x^{-26} = -26 x^{-27} = -\frac{26}{x^{27}}$  .
5.  $\frac{d}{dx} \frac{1}{x^{27}} = \frac{d}{dx} x^{-27} = -27 x^{-28} = -\frac{27}{x^{28}}$  .
6.  $\frac{d}{dx} \frac{1}{x^{28}} = \frac{d}{dx} x^{-28} = -28 x^{-29} = -\frac{28}{x^{29}}$  .
2.  $\frac{d}{dx} \frac{1}{x^{29}} = \frac{d}{dx} x^{-29} = -29 x^{-30} = -\frac{29}{x^{30}}$  .



