## Basic Toolkit of Functions - C.Coleman

| Constant                          | f(x) = a<br>y = a   |   |
|-----------------------------------|---|---|
| Identity                          | f(x) = x $y = x$  | 3                                       |
| Reciprocal                        | $f(x) = \frac{1}{x}  y = \frac{1}{x}$                       |   |
| Quadratic                         | $f(x) = x^2$ $y = x^2$ n is even                            |   |
| Power (Even or Odd)               | $f(x) = x^n \qquad y = x^n$                                 | n is even or odd                        |
| Cubic                             | $f(x) = x^3$ $y = x^3$ n is odd                             | 3 / 3 / 3 / 3 / 3 / 3 / 3 / 3 / 3 / 3 / |
| Greatest Integer                  | f(x) = [x]<br>y =[x]  |   |
| Square Root                       | $f(x) = \sqrt{x}$ $y = \sqrt{x}$                            | 2 2                                     |
| Absolute Value                    | f(x) =  x  $y =  x $  |   |
| Exponential                       | $f(x) = a^{x}$ $y = a^{x}$                                  | ,                                       |
| Logarithm                         | $f(x) = \log_a x$ $y = \log_a x$ $f(x) = \ln x$ $Y = \ln x$ |   |
| Trigonometric cosine sine tangent | $f(x) = \cos(x)$<br>$f(x) = \sin(x)$<br>$f(x) = \tan(x)$    | 3 |