

For the following functions

- Name the parent function
- Name all transformations
- Sketch (show any important points and asymptotes)

1. $f(x) = 3x^2$ $y = \frac{2}{x}$ $g(x) = -2\sqrt{x}$ $r(x) = 0.5 \sin x$

2. $y = 3^x - 6$ $k(x) = x^2 + 4$ $y = \sin x - 1$ $l(x) = \frac{1}{x} - 5$

3. $m(x) = 2 \cdot 4^x - 3$ $y = -\sqrt{x} + 3$ $n(x) = \frac{3}{x} - 2$