

M303D Practice Test 1

1. If $f(x) = 1/(x + 2)$, simplify $(f(3 + h) - f(3))/h$.
2. Find the standard form of the equation of the line which passes through the points $(-1, 3)$ and $(2, 5)$.
3. If $f(x) = \sqrt[4]{x}$, graph $y = f(x + 2)$, $y = f(x) + 2$, and $y = -2f(x)$.
4. Simplify $81^{3/4}$.
5. Solve the inequality $-3 \leq 2 - x < 7$.
6. Solve the equation for x : $y = \frac{2x + 3}{3 - x}$.
7. Sketch a curve which is not the graph of a function.
8. Exercise 15 page 39.
9. If $f(x) = 1/(x + 2)$, simplify $f(f(f(3)))$.
10. Simplify, leaving no negative exponents: $(2x^{-3}y^2)^{-4}$.