

Math 371

Quiz 11, May 1, 2014

Name: _____

Derive an approximation formula for $f'(x)$ which has form

$$f'(x) \approx \frac{1}{2h} (4f(x+h) - 3f(x) - f(x+2h))$$

with error term $\frac{1}{3}h^2 f'''(\xi)$.