

TMATH 124: Concept Check Week 2b

Be sure to write down your ideas (numerically, algebraically, or geometrically) so that you can earn credit for your work!! To earn full marks for this you must attempt all problems.

1. Find the limit, if it exists either numerically, graphically, or algebraically of

$$\lim_{x \rightarrow \infty} \frac{3x^4 - 7x^2 + x}{x^3 - 2x + 3}$$

2. Use the piece-wise defined function of $f(x)$ below to answer the following.

(a) $f'(0)$

(b) $f(0)$

(c) $f'(1)$

