## Khan Academy Links for Prelim 1 Prep

I went through the *Prelim 1 Review* and *Prelim 1 Practice* sheets on the MATH1110 Canvas page, here are links to Khan Academy questions which are very similar.

If you were unable to do / were confused about a question on any of these sheets, after doing these KA questions / looking at the KA solutions, you will probably be able to answer the question correctly.

## Prelim 1 Review Links

- (a) https://www.khanacademy.org/math/ap-calculus-ab/ab-limits-new/ab-1-5b/ v/limit-at-a-point-of-discontinuity?modal=1
  - (b) https://www.khanacademy.org/math/ap-calculus-ab/ab-limits-new/ab-1-8/e/squeeze-theorem?modal=1
  - (c) https://www.khanacademy.org/math/ap-calculus-ab/ab-limits-new/ab-1-6/ e/find-limits-using-trig-identities?modal=1 and https://www.khanacademy. org/math/ap-calculus-ab/ab-limits-new/ab-1-8/v/sinx-over-x-as-x-approaches-0? modal=1
  - (d) https://www.khanacademy.org/math/ap-calculus-ab/ab-limits-new/ab-1-7/a/limit-strategies-flow-chart?modal=1
  - (e) Same as (c)
  - (f) https://www.khanacademy.org/math/ap-calculus-ab/ab-limits-new/ab-1-6/e/limits\_2?modal=1
- 2. https://www.khanacademy.org/math/ap-calculus-ab/ab-limits-new/ab-1-15/e/limits-at-modal=1

3. https://www.khanacademy.org/math/ap-calculus-ab/ab-limits-new/ab-1-13/e/continuity

- modal=1
- $4. \quad (a) \ \ Not \ on \ KA, see \ \ https://en.wikipedia.org/wiki/Continuous\_function\#Construction\_of\_continuous\_functions$ 
  - (b) https://www.khanacademy.org/math/ap-calculus-ab/ab-limits-new/ab-1-16/e/intermediate-value-theorem?modal=1
- 5. (a) https://www.khanacademy.org/math/ap-calculus-ab/ab-differentiation-1-new/ab-2-2/v/alternate-form-of-the-derivative?modal=1
  - (b) https://www.khanacademy.org/math/ap-calculus-ab/ab-differentiation-1-new/ab-2-2/e/the-formal-and-alternate-form-of-the-derivative?modal=1
- 6. (a) https://www.khanacademy.org/math/ap-calculus-ab/ab-differentiation-1-new/ab-2-7/e/derivatives-of-ex-and-lnx?modal=1, https://www.khanacademy.org/math/ap-calculus-ab/ab-differentiation-1-new/ab-2-5/e/differentiate-negative-pmodal=1, and https://www.khanacademy.org/math/ap-calculus-ab/ab-differentiation-ab-2-1/e/derivative-at-a-point-as-slope-of-tangent-line?modal=1
  - (b) https://www.khanacademy.org/math/ap-calculus-ab/ab-differentiation-1-new/ab-2-9/e/differentiate-rational-functions?modal=1
- 7. (a) Same as 1(d)
  - (b) Same as 1(b)
  - (c) Same as 1(b)

## **Prelim 1 Practice Links**

Solutions are available on Canvas.

- 1. https://www.khanacademy.org/math/ap-calculus-ab/ab-limits-new/ab-1-8/e/squeeze-themodal=1
- 2. https://www.khanacademy.org/math/ap-calculus-ab/ab-limits-new/ab-1-16/e/intermediamodal=1
- 3. (a) https://www.khanacademy.org/math/ap-calculus-ab/ab-limits-new/ab-1-15/e/limits-at-infinity-where-x-is-unbounded?modal=1
  - (b) Same as above
- 4. https://www.khanacademy.org/math/ap-calculus-ab/ab-differentiation-1-new/ab-2-4/e/differentiability-at-a-point-algebraic?modal=1
- 5. (a) https://www.khanacademy.org/math/ap-calculus-ab/ab-differentiation-1-new/ab-2-6a/e/basic-differentiation-rules?modal=1
  - (b) https://www.khanacademy.org/math/ap-calculus-ab/ab-differentiation-1-new/ab-2-1/e/derivative-at-a-point-as-slope-of-tangent-line?modal=1