

Math 120 A Spring 2018
Mid-Term Exam Number Two
May 17, 2018

There were two versions of the exam.

Version A

In Version A, in problem 1, the tree is 3 meters tall today.

1. (a)

$$h(t) = \frac{48t + 60}{7t + 20}$$

(b) 21.25 years from today

2. 23.5691544 years after 1990

3. (a) $f^{-1}(x) = -\frac{3}{2} - \sqrt{\frac{2x+11}{4}}$

(b) $-\frac{1}{2} \pm \frac{\sqrt{5}}{2}$

4. 4.6199891964 cm

Version B

In Version B, in problem 1, the tree is 5 meters tall today.

1. (a)

$$h(t) = \frac{11t + 25}{t + 5}$$

(b) $\frac{265}{7}$ years from today

2. 21.5942502 years after 1990

3. (a) $f^{-1}(x) = \frac{6}{5} - \sqrt{\frac{5x-2}{75}}$

(b) 1 and $-4/3$

4. 9.2399783929 cm