

Math 120 A, B - Winter 2011
Mid-Term Exam Number Two
February 24 , 2011
Answers

There were two versions of the exam.

Version A - Problem 1 involved 1000 meters of fencing.

1. (a) 69.6788 m (b) The radius of the circle should be zero.
2. (a) 0.06652 m (b) 5.0555°
3. (a) There are infinitely many such functions. One is $f(x) = \frac{x+4}{x-2}$
(b) $f^{-1}(x) = 2 - \sqrt{x-3}$
4. 447.84 years after 2005

Version B - Problem 1 involved 800 meters of fencing.

1. (a) 52.7311 m (b) The radius of the circle should be zero.
2. (a) 0.11104 m (b) 16.8517°
3. (a) There are infinitely many such functions. One is $f(x) = \frac{x+10}{x+4}$
(b) $f^{-1}(x) = 5 + \sqrt{7+x}$
4. 24.87 years after 1995