

Math 120 A Spring 2011  
Mid-Term Exam Number Two  
May 19, 2011  
Answers

There were two versions of the exam.

In version A, in problem 1, Frank had 62 percent accuracy at the age of 20 years.

1.  $\frac{1450}{23} = 63.04347826\dots$

2. (a)  $x = -7$  is the only solution. (b)  $h^{-1}(x) = x + \frac{9}{2} - \frac{\sqrt{36x + 81}}{2}$

3. 36.1314 years after 1990.

4. 7.4604 cm

In version B, in problem 1, Frank had 56 percent accuracy at the age of 20 years.

1.  $\frac{1600}{29} = 55.1724137\dots$

2. (a)  $x = \frac{7}{9}$  is the only solution. (b)  $h^{-1}(x) = x + 2 - 2\sqrt{x + 1}$ .

3. 21.20085 years after 1990.

4. 9.325 cm