

Math 120 B, C - Autumn 2008
Mid-Term Exam Number Two
November 13, 2008
Answers

There were two versions of the exam.

Version A - Problem 1 involved 195 meters of fencing.

1. The enclosure should be 19.5 meters wide and 24.375 high.
2. (a) $f(x) = \frac{80x + 500}{x + 50}$ (b) $f^{-1}(x) = \frac{500 - 50x}{x - 80}$
3. Godzilla was 1012.834 meters tall at the second measurement.
4. The pupil diameter was 2.75446 mm.

Version B - Problem 1 involved 210 meters of fencing.

1. The enclosure should be 20.5 meters wide, and 25.625 meters high.
2. (a) $f(x) = \frac{70x + 200}{x + 20}$ (b) $f^{-1}(x) = \frac{200 - 20x}{x - 70}$.
3. Godzilla was 483.0219 meters tall at the second measurement.
4. The pupil diameter was 4.19313 mm.