

Math 4300 - Test 1 Study Guide

Test 1 covers HW 1 and HW 2.

Bring a calculator that isn't your phone to the exam.

Computations:

- Find the unique line through P and Q.
HW #1 – problems 1, 2.
- Determine if a set of points is collinear or non-collinear.
HW #1 – problems 3, 4.
- Determine if two lines are parallel or not.
HW #1 – problems 5, 6.
- Finding the coordinates of points using the standard rulers. Drawing pictures of the rulers.
HW #2 – problems 1, 2.
- Finding the distance between two points.
HW #2 – problems 3, 4.
- Finding a ruler with $f(P) = 0$ and $f(Q) > 0$
HW #2 – problems 6, 7.
- Other ruler questions.
HW #2 – problem 5.
- **Calculations that will NOT appear on the test.**
HW #1 – problems 11, 12 (but they are good to check out because of what they are showing you)

Proofs:

There will be at least one proof directly from the homework.

- Proofs about collinear and non-collinear points.
HW #1 – problems 7, 10.
- Existence of points and/or lines with certain properties.
HW #1 – problems 8, 9.
- Proofs involving lines and rulers and distances.
HW #2 – problems 8, 9.
- **Proofs that will NOT appear on the test.**
HW 1 – problems 13, 14 (but they are good to do if you want to fill in the gaps from class)
HW 2 – problem 10 (this one is good if you want to read the proof we didn't do in class)