

Math 103 Final Exam Info (updated 5/05)

Questions 1 – 23: Short Answer (or completion)

1. Translate MCMLIX into Hindu Arabic numerals
2. If an arithmetic sequence began with 3, 5, what is the next term?
3. Write $\frac{3}{8}$ as a decimal
4. What is the degree measure of each interior angle of a regular pentagon?
5. If $10 \ln$ then will $2 \ln$?
6. Name a fraction between $\frac{5}{8}$ and $\frac{6}{8}$
7. State an irrational number between 9 and 10
8. Name three of the 7 base units in the metric system

Questions 24-36: True False

- T F 28. All square are rectangles.
T F 29. 29 is prime.
T F 30. Each interior angle of a rectangle is 180° .

Question 37: Probability

37. If a bag contains 2 red and 4 green marbles, what is the probability of drawing 2 green marbles without replacement?

Questions 38 – 51: Open Ended Problems

38. Find perimeter and area of a given figure
39. Determine if a network is traversable
40. Use charged particle model to demonstrate $-3 + 2$
41. Change $0.666\dots$ to a fraction
42. Round 504.499 to the nearest tenth.
43. Find the mean, median and mode of the set: $\{2, 3, 3, 5, 8, 10, 11\}$

Question 52: Poly's 4 steps to problem solving

Question 53: Van Hiele levels of Geometric development

Question 54: Illinois Learning Standards question

Question 55-58: classify as “divvy up” or “measure out”

55. Four children will share a bag of 12 gumballs. How many will each child get?

Questions 59-63, Lab activity questions

58. Use base 10 blocks to clearly demonstrate $12-7$
59. Use 2-color chips to demonstrate $+2 - -5$

Questions 64-65, Problem-type classification (several questions to each of these types)

(change add-to, part-part-whole, equalize, compare, change take-away)

64. Sue had some candy. She gave 3 to John. How she has 5 left. How many did she start with?

(groups of, rectangular array, rate, comparison, combinations, area, partition, measurement)

64. Sue share a bag of 24 jelly beans by giving each of 4 friends the same amount. How many jelly beans did each friend get?