

MATH 1100
Common Final Examination
Fall , 2000

Please make sure that your name and student identification number appear on the answer sheet in the space provided for this purpose.

This exam consists of 30 multiple choice questions. Read the questions carefully. You must use a pencil with soft black lead (#2 or HB) to complete the answer sheet. If you mark two or more answers corresponding to a single problem, then that problem is counted as incorrect.

9. Determine the slope and y -intercept of the line with equation $8x - 4y = 12$.

- (a) slope= 8 y -intercept= 12
(b) slope= 8 y -intercept= -12
(c) slope= -4 y -intercept= -3
(d) slope= 2 y -intercept= -3
(e) slope= -2 y -intercept= 3

10. A circle has equation $x^2 + 6x + y^2 - 4y = 3$. Find the center and radius of the circle.

- (a) center at $(-3, 2)$, radius $\sqrt{3}$
(b) center at $(-3, 2)$, radius 4
(c) center at $(6, -4)$, radius $\sqrt{3}$
(d) center at $(3, -2)$, radius 4
(e) None of the above.

11.

Let

$$f(x) = \begin{cases} 3x - 1, & x > 1 \\ \end{cases}$$

15. Identify the function whose graph is the graph of $y =$

21. Let $f(x) = 2x^4 - 3x^2 + x - 2$. Find the remainder when $f(x)$ is divided by $x - 1$.

(a) -2

(b) -1

(c) 0

(d) 1

(e) 2

22. Let $g(x) = 4x^3 - x^2 - 4x + 3$. Consider the list of all potential rational zeros using the Rational Zero Theorem. Which of the following is not on this list?

(a) 1

(b) -3

(c) $\frac{1}{4}$

27. Factor 8

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FINAL EXAM

Multiple Choice