



Name _____ Class _____ Date _____

AFTER THIS WORKSHEET YOU CAN

- ✓ Build ranges with colon notation.
- ✓ Define matrices.
- ✓ Compute determinants.
- ✓ Know MATLAB's main use cases.

Section A • Concept Check • BEGINNER $4 \times 1 = 4$ _____

- 2:2:10 produces:
☐ A. [2 4 6 8 10] ☐ B. [2 10] ☐ C. [2 3 4 ... 10]
☐ D. [10 8 6 4 2]
- The matrix $[[5,6],[7,8]]$ is written as:
☐ A. $A = [5 \ 6; \ 7 \ 8]$ ☐ B. $A = (5,6,7,8)$
☐ C. $A = \{5 \ 6; \ 7 \ 8\}$ ☐ D. $A = 5,6;7,8$
- $\det([4 \ 0; \ 0 \ 5])$ returns:
☐ A. 20 ☐ B. 9 ☐ C. 0 ☐ D. 45
- The MATLAB function for a determinant is:
☐ A. `det()` ☐ B. `determinant()` ☐ C. `dt()`
☐ D. `solve()`

Section B • Problem Solving • INTERMEDIATE $2 + 3 \times 3 = 11$ _____

- $2:2:10 = [2 \ 4 \ 6 \ 8 \text{}]$.
- Rows of a matrix are separated by a _____.
- What does 2:2:10 produce in MATLAB?

- Write the MATLAB code to create the matrix $[[5,6],[7,8]]$.

- What does $\det([4 \ 0; \ 0 \ 5])$ return?

Section C • Challenge • CHALLENGE 5 _____

- What function in MATLAB computes a matrix determinant?

Reflection — the most useful thing I learned: _____

A ___/4 B ___/11 C ___/5 Total ___/20

Teacher's Signature _____

Parent's Signature _____

ANSWER KEY — FOLD OR CUT BEFORE HANDING OUT

1-A 2-A 3-A 4-A | 5 10 6 semicolon 7 = [2 4 6 8 10] 8 = A = [5 6; 7 8] 9 = 20 | 10
= det()

