Matrices KEY

Page 2

$\mathbf{A} = \begin{bmatrix} 5 & 6 & 4 & 5 & 9 \\ 21 & 23 & 24 & 22 & 20 \end{bmatrix}$ a 2 × 5 matrix

b′ = (0, 1, 0, 0) a 1 × 4 matrix or a 4-element row vector

$\mathbf{Y} = \begin{bmatrix} 2 & 3 & 1 \\ 5 & 6 & 8 \\ 9 & 4 & 7 \end{bmatrix}$ a 3 × 3 square matrix

Page 3

1. Which student obtained a 35 and on which test? Report the row and column: (2, 4)
2. What did student 4 receive on exam 1? 58

Page 4

Does $(\mathbf{X}')' = \mathbf{X}$? YES

Page 6

$\mathbf{AB} = \begin{bmatrix} 12 & 3 \\ 2 & 25½ \end{bmatrix}$ $\mathbf{BC} = \varnothing$ $\mathbf{CD} = \begin{bmatrix} 9 & 31 & 48 \\ 9 & 29 & 47 \\ 13 & 43 & 70 \end{bmatrix}$

Compute $\mathbf{AB} = \begin{bmatrix} 82 & 68 & 52 \\ 82 & 84 & 50 \end{bmatrix}$

Page 7

Can we compute a $\mathbf{A}$ or a′ $\mathbf{A}$? a $\mathbf{A}$ (2×1)(2×4): NO a′ $\mathbf{A}$ (1×2)(2×4): YES