Matrices M1: Matrix Basics

Put the following data in a matrix form, then state the dimensions of the matrix.

1. These are the number of students enrolled in the following sports.

	Ski Club	Football	Basketball	Track
Boys	2	15	23	13
Girls	3	0	18	21
Koalas	1	2	0	0

2. These are the amounts of money spent for meals on a school trip.

	Monday	Tuesday	Wednesday	Thursday	Friday
Breakfast	$2.75	$1.75	$3.25	$1.75	$1.75
Lunch	$4.50	$3.75	$4.25	$3.50	$2.75
Dinner	$5.75	$6.50	$6.50	$4.75	$5.75

State the dimensions of the following matrices:

3. $\begin{bmatrix} 2 & 3 & 5 & 1 \end{bmatrix}$

4. $\begin{bmatrix} 2 \\ 7 \\ 9 \end{bmatrix}$

5. $\begin{bmatrix} 2 & 4 & 2 & 3 \\ -1 & 0 & 1 & 1 \\ 9 & -2 & 0 & -3 \end{bmatrix}$

6. $\begin{bmatrix} 3 & 0 & -2 & 5 & 6 & 7 \end{bmatrix}$

7. $\begin{bmatrix} -2 & -2 & 1 \\ 0 & 1 & 4 \\ 1 & -3 & 5 \end{bmatrix}$

The following questions refer to matrices in #3 – #7.

8. Which of these matrices are row matrices? _____

9. Which of these matrices are column matrices? _____

10. Which of these matrices are square matrices? _____

11. For #7, what is element a_{13} ? _____

12. For #7, what is element a_{23} ? _____