1.2 Multiplying Matrices Accl Precalc Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Determine the dimensions of each matrix product.

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Multiply the following matrices, if possible.

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Show the matrices you set up to following matrix multiplication word problems. You may use a calculator on these.

1. On two days, a store sold the following amounts of pencils, erasers, and binders.



If the price for each pencil, eraser, and binder, respectively, is $0.20, $0.35, and $2.85, how much was made each day?

1. Old Macdonald has 3 fruit farms. On these he grows peaches, apricots, plums and apples. When he picked the fruit is sorted into layered boxes in which they will be sold. The chart below shoes the number of boxes for each type of fruit.



Suppose he sells peaches for $27 a box, apricots for $15 a box, plums for $34 a box, and apples for $17 a box. Find the income for each farm. How much will he make total?

1. In a three team track meet, the following numbers of 1st, 2nd, and 3rd place finishes were recorded.



If 5 points are award for 1st place, 3 points for 2nd, and1 point for 3rd, determine who won the track meet.

1. A manufacturer produces 3 models of a product that are shipped to 2 warehouses. The number of units of model *i* that are shipped to warehouse *j* is represented by in the matrix

 The price per unit is represented by . Determine the product of the matrices and state what each entry represents.

1. Find a pair of 2 x 2 matrices whose product is 0, but none of the entries in the matrix are 0.
2. Find x and y if  , , and 
3. Given , find A2, A3, and A4. Compare these answers to  ( Remember )
4. If matrix A and B each have dimensions of 2 x 3, C is 3 x 2, and D is 2 x 2. Determine the dimensions of the product if it is defined.







