

2016 Honors Precalculus Chapter 7 Free-Response Question

Honors Precalculus

Section 1 Part B

Time: 10 minutes

Number of Problems: 1

Part II: Congratulations! You have been hired as the new Equipment Manager for the National League in baseball. You want to save the teams some money so they can keep their best players, so you check out some different stores. You can find the orders from each team in Table A and the prices from different suppliers in Table B.

Table A:

	Bats	Balls	Gloves
Cubs	36	300	15
Cardinals	38	304	17
Diamondbacks	42	310	23
Braves	34	350	25
Reds	39	341	24
Rockies	38	354	21
Dodgers	41	401	18
Marlins	52	380	14
Brewers	43	430	15
Mets	41	356	20
Phillies	37	371	21
Pirates	43	330	19
Padres	34	331	15
Giants	32	334	14
Nationals	31	376	19

Table B:

Sports Authority	Dicks Sporting Goods	Target	
\$90	\$92	\$89	Bats
\$6	\$5	\$5	Balls
\$60	\$62	\$63	Gloves



(a) Compute the product $[A][B]$ (you may use your calculator to do this). Record the results below. **Clearly label the row and column of the resultant matrix with its meaning in the context of the problem.**

(b) What store provides the Cubs with the cheapest option to order their supplies?

(c) What is the **most expensive** price for the supplies? What combination of team and supplier gives this price?