

Name: _____

Group Members: _____

The Hiring Problem

Mission:

Your group is in charge of hiring some workers to help clean, paint, and move furniture in the school. These workers must complete the job within 4 days.

Conditions:

1. You can hire from each company only once, and you must use all the workers that are provided by the company.
2. You have a Worksite Supervisor who can only supervise at most 12 workers per day, so you try to hire as many as 12 per day. Assume that each worker to be hired works the same amount of time, and produces the same amount of work per hour.
3. You need at least 14 workers for moving furniture, 14 workers for painting, and 14 workers for cleaning within the 4 day deadline.

Presentation:

You must present your case to both the class and your college buddy. Show in full detail how you arrived at your decision of what companies to hire. Show your productivity index in the provided chart and use it to make your decisions.

Edmodo Updates:

Throughout the process of solving this problem you will individually be responsible for updating your college buddy with the progress you and your team has made. You will be explaining your thoughts, asking questions, and describing the process of solving this problem. They may give you advice, ask you questions, or have you explain your thinking so they have a clearer understanding of the problem solving process.

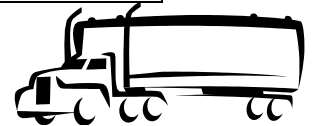
Cleaning Services					
Company	Two Maids & A Mop	The Maids	The Cleaning Authority	Merry Maids	De-Luxe Cleaning Service Inc.
Number of Workers	4	2	6	3	5
Cost (\$)	160	76	270	120	175



Painting Services					
Company	Nashville Painters	The House Painters	Textbook Painting	Paint Unique	Straight Line Painting
Number of Workers	3	6	7	4	5
Cost (\$)	114	240	315	160	210



Moving Services					
Company	The Moving Company	Pack-Rat	Pods	Two Men & A Truck	All My Sons Moving
Number of Workers	7	4	3	6	4
Cost (\$)	245	160	135	228	140



*To find the productivity index:

$$\frac{\text{Number of Workers} \times 100}{\text{Total Cost}} = \text{Productivity Index}$$

Round this to the nearest thousandths place...that's three numbers after the decimal!

*The larger the index, the better! (That means more productivity is happening!)

Cleaning Services

Company	Two Maids & A Mop	The Maids	The Cleaning Authority	Merry Maids	De-Luxe Cleaning Service Inc.
Number of Workers	4	2	6	3	5
Cost (\$)	160	76	270	120	175
Cost per Worker	\$40	\$38	\$45	\$40	\$35
Productivity Index	2.5	2.631	2.2....	2.5	2.857

Painting Services

Company	Nashville Painters	The House Painters	Textbook Painting	Paint Unique	Straight Line Painting
Number of Workers	3	6	7	4	5
Cost (\$)	114	240	315	160	210
Cost per Worker	\$38	\$40	\$45	\$40	\$42
Productivity Index	2.631	2.5	2.2....	2.5	2.380

Moving Services

Company	The Moving Company	Pack-Rat	Pods	Two Men & A Truck	All My Sons Moving
Number of Workers	7	4	3	6	4
Cost (\$)	245	160	135	228	140
Cost per Worker	\$35	\$40	\$45	\$38	\$35
Productivity Index	2.875	2.5	2.2...	2.631	2.875