

	Taxi Cabs	Points	Section points																								
1. a	<p>6 large taxis hold 42 people 75 = 42 = 33 people 33 people need 9 small taxis with 3 empty seats</p> <p>6 large taxis cost 6 x \$63 = \$378 9 small taxis cost 9 x \$40 = \$360 Total cost \$738</p>	<p>2</p> <p>2</p>	<p>4</p>																								
2.	<p>The best strategy is to increase the number of large taxis (because each seat costs \$9) and decrease the number of empty seats in the small taxis.</p> <table> <thead> <tr> <th>Large taxis</th> <th>Small taxis</th> <th>Cost in \$</th> <th></th> </tr> </thead> <tbody> <tr> <td>6</td> <td>9</td> <td>738</td> <td></td> </tr> <tr> <td>7</td> <td>7</td> <td>721</td> <td></td> </tr> <tr> <td>8</td> <td>5</td> <td>704</td> <td></td> </tr> <tr> <td>9</td> <td>3</td> <td>687</td> <td>no empty seats</td> </tr> <tr> <td>10</td> <td>2</td> <td>710</td> <td></td> </tr> </tbody> </table> <p>\$687 is the lowest possible cost</p>	Large taxis	Small taxis	Cost in \$		6	9	738		7	7	721		8	5	704		9	3	687	no empty seats	10	2	710		<p>2</p> <p>3</p> <p>1</p>	<p>6</p>
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