<table>
<thead>
<tr>
<th>Question</th>
<th>Points</th>
<th>Notes</th>
</tr>
</thead>
</table>
| 1        | 12/20  | -8 points: Your answers were so close! In Knovel, the correct answers can be found in chapter 9.10.4 in *Temporary Demountable Structures - Guidance on Procurement, Design and Use* (using keywords like design, wheelchair, and ramp). The correct answers are:  
  c. Absolute maximum angle = 1:12, recommended angle = 1:15  
  d. Ideal width = Between 1.0m and 1.3m |
| 2        | 20/20  |       |
| 3        | 20/20  |       |
| 4        | 20/20  |       |
| 5        | 20/20  |       |

**Extra Credit:**

**Missed Points:**

**Final Score:** 92

**Additional Comments:** Two versions of Silver B’s answers were submitted to DropBox. The only difference were the citations for Question 4, which were more complete in the version submitted by Gregory Xie.
Treasure Hunt - Silver Team B

1. You are volunteering with a local group that is making a public park more accessible to wheelchair users during a community celebration. You’ve been tasked with building a temporary access ramp and need to be sure your ramp meets certain design requirements. You think a handbook may have information to help you answer the following questions. [Greyson, Evan]

   a. What is the absolute maximum angle for your ramp? What is the recommended angle for your ramp?

   **Absolute Maximum Angle:** 7.13° (Gradient: 1:8, Percent 12.5, Maximum Rise 3”)
   **Recommended Angle:** 4.76° (Gradient: 1:12, Percent: 8.3%)


   b. What is the ideal width for your wheelchair ramp when measured, at its narrowest point, in meters?

   **0.915 m**


2. It would be helpful to get some statistics on the size of the online greeting card sales industry in the United States [Lauren, Kaleb]

   a. What is the revenue in $ of the online greeting card sales industry in the United States in 2021?

   **$1,289m.**


   b. What specific company has the largest market share within this industry?

   **Hallmark Cards Inc.**
3. You need to find a partner to help develop and commercialize (hopefully) your new idea for a civic organization. An industry expert has suggested to you that Rotary international might be a potential partner. Before contacting them, learn more about Rotary International. [Evan, David]

   a. The year when the company was founded or incorporated (or changed ownership)

   **Founded in 1905.**


   b. The address of their headquarters

   **One Rotary Ctr 1560 Sherman Ave. Evanston, IL 60201-3698 USA**


   c. Total number of employees worldwide (i.e.; all sites, if possible.)

   **800 Employees**


   d. Latest revenue (sales) figures

   **$503 Million**


   e. What is US 8-Digit SIC (Standard Industrial Classification) code for their primary industry?

   **86410100 - Civic associations**

4. You would like to learn more about water treatment, and you know that the right book can provide a good summary on this topic. Use the resources found on the 2.009 Guide (https://libguides.mit.edu/2-009) to answer the following questions: [Sofia, Greg]

1. Find a general book on water treatment, available in the MIT Libraries. Provide a good citation for the book, including the library call # at the end of the citation and which library has the item (Dewey, Rotch, Barker, etc.) or if it is an eBook.


Barker Library

2. To find more specific information, you want to read a scholarly article on the narrower topic of water treatment using solar energy.
   a. Use a database to search for an English language journal article on this topic published in 2010-2021. Provide a good citation for the article, and include the bibliographic database you used to find the citation.


Used Compendex/Inspec

b. Does MIT have a print subscription to this journal for the year that the article was published? If yes, in which library is it held? Does MIT have access to an electronic version of this article?

No. Library Storage Annex only has issues from 1976-2006.

MIT does not have access to an electronic version.

5. You want to make sure your design or project idea is unique before you take it to a company or consumer for production. Check the patent literature, and find one granted (not an application) United States utility patent for a caption telephone system. [Janice, Julia]

- **What is the patent title**: Captioned telephone service
- **What is the patent number**: US10587751B2
- **Who is the assignee**: Ultratec, Inc
- **Who is the inventor**: Engelke, Robert M; Colwell, Kevin R; Vitek, Troy D
Provide at least one classification code assigned to this patent (number and name, example: 446/486: Amusement Devices: Toys/Resilient toy or actuator, OR A63F9/00: Sports; Games; Amusements: Card, board or roulette games; indoor games using small moving playing bodies, miscellaneous ames: games not otherwise provided for)

Classification Code and meaning: H04M 11/066, Telephone sets adapted for data transmission

Where did you find this patent/what database did you use?: PatentScout (MIT Only Resource)

Citation: