<table>
<thead>
<tr>
<th>Question</th>
<th>Points</th>
<th>Notes</th>
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<td>1</td>
<td>20/20</td>
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<tr>
<td>2</td>
<td>24/20</td>
<td>+4 points: For additional info for question 2b.</td>
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<td>3</td>
<td>24/20</td>
<td>+4 points: For additional info on questions 3a &amp; d</td>
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<td>4</td>
<td>20/20</td>
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<td>5</td>
<td>20/20</td>
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<tr>
<td>Extra Credit:</td>
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<td>Missed Points:</td>
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<td>Final Score:</td>
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<td>Additional Comments:</td>
<td>Two versions of Purple B’s answers were submitted to DropBox (content was identical across both documents).</td>
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1. [DONE] You are designing a rear-mounted bicycle child carrier so that parents can introduce their young children to the world of bicycling. To make sure your carrier is safe, you need to know what specifications are needed for your design. You know there is a standard available to help you answer the following questions:
   a. What is the minimum height needed for the backrest of your carrier in millimeters and inches? The backrest must have a minimum height of 350mm (13.8 in).
   b. What is the maximum weight of a child that can be transported in your carrier in pounds and kilograms? The maximum weight of children carried by this carrier is 18kg (40 lbs).


2. [DONE] It would be helpful to get some statistics on the size of the social networking sites industry in the United States
   a. What is the revenue in $ of the social networking sites industry in the United States in 2021? 62.49 $bn
   b. What specific company has the largest market share within this industry
      Largest is Facebook with 47.43 $bn 75.9% market share
      LinkedIn with 4.44 $bn 7.1% market share
      Twitter with 2.62 $bn 4.2% market share

IBIS World Industry Reports
https://my.ibisworld.com
US SPECIALIZED INDUSTRY REPORT OD4574: Social Networking Sites
Accessed September 15, 2021

Interesting Notes:
- Revenue is directly tied to advertising

3. [DONE] You need to find a partner to help develop and commercialize (hopefully) your new product idea for a kind of smartphone. An industry expert has suggested to you that Apple, Inc. might be a potential partner. Before contacting them, learn more about Apple, Inc.
   a. The year when the company was founded or incorporated (or changed ownership)
      i. Apple was incorporated 03/01/1977 as a corporate, Computer Hardware company. Apple was started the year before on April 1st, 1976, informally by Steve Wozniak and Steve Jobs. Apple Inc was previously named Apple Computer, Inc until 09/01/2007.
b. The address of their headquarters
   i. Apple’s current headquarters is located in Cupertino California. It’s address is:
      "APPLE PARK WAY
      CUPERTINO, CA 95014
      United States of America"

c. Total number of employees worldwide (i.e., all sites if possible)
   i. Apple has 147,000 Employees

d. Latest revenue (sales) figures
   i. Apple’s operating revenue (turnover) for 2020 was 275 billion dollars a 5.5% increase from the previous year. While the Net income for 2020, was 57.4 billion dollars with a 3.9% increase. The Market Capitalization as of September 14th, 2021 was 2.45 billion dollars 1 percent down from the last time it was taken.

e. What is US 8-Digit SIC (Standard Industrial Classification) code for their primary industry?
   i. 36639906 - Mobile communication equipment

f. Citations:

4. [DONE] You would like to learn more about playgrounds, 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:

a. Find a general book on playgrounds, 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.

b. To find more specific information, you want to read a scholarly article on the narrower topic of playground equipment safety.

   1. 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
2. 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? MIT does not have a print subscription for the journal. MIT has access to an electronic version of the article.

5. [DONE] You want to make sure your design or project idea is unique before you take it to a company or customer for production. Check the patent literature, and find one granted (not an application) United States utility patent for a telemedicine system.
   a. What is the patent title? Smartphone based telemedicine system
   b. What is the patent number? US10216906B2
   c. Who is the assignee? The inventor? The assignee is Vigilias LLC, and the inventors are Patrick Zana Desgranges and Elisha Yaghmai.
   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 games: games not otherwise provided for) G06F19/3418 - Telemedicine, e.g. remote diagnosis, remote control of instruments or remote monitoring of patient carried devices
   e. Where did you find this patent/what database did you use? Google Patents (as referred by the MIT Libraries page)

Citation for Problem 5: