# Red A

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<thead>
<tr>
<th>Question</th>
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<tr>
<td>1</td>
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<td>2</td>
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<td>+4 points: For additional info for question 2b.</td>
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<td>4</td>
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<td>-2 points: Your citation for the journal article is missing some of the authors and has the wrong volume number, but I was able to find the text with the information you provided.</td>
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<td>5</td>
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**Extra Credit:**

|                  | 20     | We loved Pirate Ello on their little boat and the maps you created for each question! Really great and clear formatting of your document. |

**Missed Points:**

**Final Score:**

|                  | 122    |       |

**Additional Comments:**
You are designing home playground equipment. You want your product to be welcoming, but you also need to be sure that your design is safe for children to use. You know that there is a standard on playground safety that can help ensure your design is safe and help you answer the following questions:

A. What is the **standard test weight** for a single occupancy swing in pounds and kilograms?

   **Answer:** The standard test weight is 80 lbs., or 37 kg in metric.

B. What is the required range for **tread width** on a single access stepladder in inches?

   What about for a stepladder with two-abreast access?

   **Answer:** Single File access is recommended to be 12”-21". Two abreast stepladders are not recommended in regards to stepladders.
2.009 Treasure Hunt
Red Team - Section A

*** Resource Path:


*** Citation:

Section #2 – Market Share and Statistics

It would be helpful to get some statistic on the size of the retail market for smartphones in the United States.

A. What is the revenue in $ of the retail market for smartphones in the United States in 2021?

   Answer: The annual revenue for the retail phone market is $84.1 BN in revenue.

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

   Answer: Apple Inc., with a 28.5% market share in the US smartphone industry.

How we found the Information

*** Resource Path:


*** Citation:

You need to find a partner to help develop and commercialize (hopefully) your new product idea for greeting cards. An industry expert has suggested to you that Hallmark Cards, Incorporated might be a potential partner. Before contacting them, learn more about Hallmark Cards, Incorporated.

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

   **Answer:** The Company was founded in 1910 [1,2]

B. The address of their headquarters

   **Answer:** Their headquarters are located at 2501 Mcgee St, Kansas City, Missouri, 64108-2600, US [1,2]

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

   **Answer:** 27k (all sites) and 2.7k at the main headquarters [1]

D. Latest revenue (sales) figures

   **Answer:** 7.5B (figure modelled - need to figure out what year this website is referring to) [1]. 2.56B operating revenue for 2020 [2]

E. What is the US 8-digit SIC (Standard Industrial Classification) code for their primary industry

   **Answer:** 27710000 [1,2]
How we found the Information

*** Resource Path:

https://libguides.mit.edu/2-009 -> Researching companies -> D&B Business Browser -> Search for a Company -> Hallmark Cards, Incorporated

*** Citation:


Section #4 – Finding Related Books and Media (completed)

You would like to learn more about vegetable gardening, 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 vegetable gardening, 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 irrigation of gardens or crops.

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 used to find the citation.


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?

   Answer: MIT does not have a print subscription to this journal. MIT does have access to an electronic version of this article.
**How we found the Information**

*** Resource Path: ***

[https://libguides.mit.edu/2-009](https://libguides.mit.edu/2-009) -> Search Our Collections;

[https://libguides.mit.edu/2-009](https://libguides.mit.edu/2-009) -> Web of Science

*** Citation: ***


Section #5 – Patents, Trademarks, and Intellectual Property

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 fingerprint sensor.

A. What is the patent title?

Answer: Fingerprint sensor element [1]

B. What is the patent number?


C. Who is the assignee? The inventor?

Answer: Assignee: Fingerprint Cards Ab [1]
Inventor: Riedijk, Frank Robert and Hammersberg, Johan [1]

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)

Answer: G06K 9/0002: Image acquisition (materials for developing fingerprints, means for visual identification A61B 5/1172) by non-optical methods, e.g. by ultrasonic or capacitive sensing [2]

E. Where did you find this patent/what database did you use?


[1] Additional information or notes if necessary.

[2] Additional information or notes if necessary.
How we found the Information

*** Resource Path:

Classification Code: 2.009 course site --> Resources --> 2.009 library page --> Patents & standards --> Search for US Patent Classification Codes --> search: G06K 9/0002

*** Citation:


After being handed an enticing map promising to lead them to treasure, Red Team A set sail aboard the GoDo Ship Mighty Red from 10-250 to explore the vast seas of the MIT Libraries’ resources. With open minds and open laptops, we began our journey.

The first challenge our team encountered was to design home playground equipment, meant to be welcoming, fun, but most importantly safe for children to use. Red Team A had collectively seen many playgrounds in their time, and we had utilized too, but we realized first-hand experience alone would not be enough. Teams of yore must have encountered the same problems, and perhaps left behind some clues to guide us. Our tenacious teammates searched the sands of the 2.009 library resource page and unearthed a compass left behind by the American Society for Testing and Materials.

“This will certainly lead us to safety standards for home playground equipment!” we thought in unison, for Red Team A has truly enviable team synergy. We were correct in that thought. And thus, we collected the first treasure and learned a valuable lesson about safety and how to ensure we satisfied the Society. The Safety Officers aboard the Mighty Red were quite pleased in this discovery, as they are truly passionate about the topic. Into the treasure hold went the compass, and onward went our team.

The Mighty Red, as is her namesake, is quite a large vessel, built to withstand intense Brainstorms that churn never-before-seen Ideas from the deepest depths. Along our journey, Red Team A became aware of our great reliance on smartphone devices to maintain communication with our crewmates. And we began to wonder... such a wonderful product must have a wonderful retail market! Again, we consulted the map left behind by the course librarians, and found ourselves in the IBIS World (of Industry Reports). We quickly discovered the great space in the Retail Market occupied by smartphones, as well as the titan Apple Inc.
looming in the horizon. The Financial Officer took great interest in this World, and took extra care to remember how to chart this course, for in the near future Mighty Red would make preparations to enter the Retail Market again.

Emboldened by these discoveries, Red Team A pressed on. Though we had been successful in our plunders thus far, the team was slightly fatigued from the excitement of it all. And with the Mighty Red being such a large ship, the crew felt worn thin. Luckily, our resident Yoda came to the rescue with a brilliant idea. It was suggested that Red Team A send a greeting card to our other half, Red Team B, currently aboard the Sizeable Red. We would unite our crews soon enough, but perhaps it would be a good plan to send them a greeting card ahead of our fusion.

Our crew was quite thrilled by this idea, and quickly set about to discover more about Hallmark Cards, Inc., well-known for their prowess in cards of all sorts. But before we could set our sails towards Hallmark, we consulted our Information Officer to help us uncover key facts about their operations. Because, of course, it is simply not good practice to approach a new vessel without knowledge of its construction. Soon enough, we armed the Mighty Red with the D&B Business Browser, which documented all there is to know about any company vessel we could imagine. Sensing this would prove useful in the future, we deemed it valuable treasure and continued on.

After sending an encouraging greeting card in a direction that the Sizeable Red would soon intercept, our crew grew rather famished. It is important for sailors to consume vegetables and absorb proper vitamins, and so the business of starting a vegetable garden on the ship’s deck was begun. While thoroughly invested in the idea, our Tool Officer made the following observation:

“As with any endeavor, a garden is only as successful as the quality of its tools.”

This time, the Mighty Red set an immediate course for the Library Storage Annex, knowing that by request *The Principles of Vegetable-Gardening* could immediately become
available to us. Once again, we consulted the resources left for us by the course librarians to help us navigate the vast waters of the Annex. We also found that some articles could become immediately available, through an electronic access key graciously left for us by MIT. After adding these nuggets of knowledge to our growing treasure trove, we began a new journey of nurturing our own vegetables.

However, as we turned our bow away from the annex, we realized a strange creature had stowed aboard! After a thorough search of our treasure hold, we cornered a kaleidoscopic critter who seemed unfazed by the encounter and content to only greet us with a chipper "Hello!". Though it seemed friendly, we worried we would not be so lucky the next time the Mighty Red was breached.

The System Integrators aboard the vessel proposed a heightened security protocol, centered around the installation of fingerprint sensors scattered about key areas of the ship. The sensors would be keyed to only allow Red Team A (and eventually, B as well) to enter areas such as the treasure hold. However, many in the crew expressed concern about building such a system from scratch. Surely, someone else in the world must have needed to protect their treasure from strange creatures!

Indeed, after consulting a Patent Scout, the crew was informed that such an idea did exist and was under the jurisdiction of the United States Patent and Trademark Office. This was perhaps one of the most valuable treasures collected during our journey, as proper use of this resource would prevent the Mighty Red from charting a course that would end in collision with, dare I say, mightier vessels.

Finally, with a novel security system in place, Red Team A returned to their treasure hold below the decks.

“Hello!” chirped the strange creature, and we each responded in turn.

We had collected a vast amount of treasure during our journey. Though each part of our cache seemed tiny when set apart, we knew the sum of it all was far greater than each on its
own. We resolved to utilize all of our collected treasures on our long journey ahead, as their value would be lost if we left them to collect dust belowdecks.

Our Story Officer spun a tale of our adventure, so that we would never forget the treasures we collected that day. And so that we could share our story with others, so that they could also be inspired to unearth their own treasures in the vast seas of the MIT Libraries.