

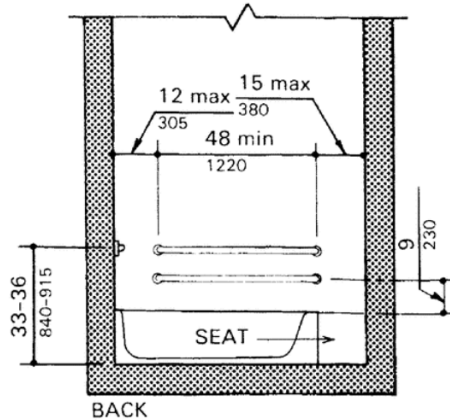
Pink B

Question	Points	Notes
1	24/20	+4 points: Including extra information on 1.a and including the diagrams
2	20/20	
3	16/20	-4 points: Only 4 digits listed on question 3e.
4	20/20	
5	24/20	+4 points: For additional info for question 5d.
Extra Credit:		
Missed Points:		
Final Score:	104	
Additional Comments:	Two versions of Pink B's answers were submitted to DropBox. The only difference was the citation for Question 1 was more complete in the version submitted by Layal Barakat.	

2.009 Information Treasure Hunt – Pink B

1. You are volunteering at an assisted living home and are responsible for selecting and installing grab bars in some of the bathrooms to make them more welcoming to residents. You think a plumbing handbook with a section on grab bars may help you answer the following questions:

- a. At what height should horizontal grab bars be mounted for adults on the wall in inches and millimet



(b) With Permanent Seat at Head of Tub

Figure 6-20 Bathtub Accessories

- 33-36 in(840-915mm) recommended for the bathtub.
9 in(230mm) above the bathtub is recommended for the lower bar.

2009, *Plumbing Engineering Design Handbook - A Plumbing Engineer's Guide to System Design and Specifications, Volume 1 - Fundamentals of Plumbing Engineering - 6.5.9 609 Grab Bars*. American Society of Plumbing Engineers (ASPE), from <https://app.knovel.com/hotlink/pdf/id:kt0096SUZ1/plumbing-engineering-2/609-grab-bars> (Accessed 09/16/21)

- b. How much space should there be between the grab bar and the wall in inches and millimeters?

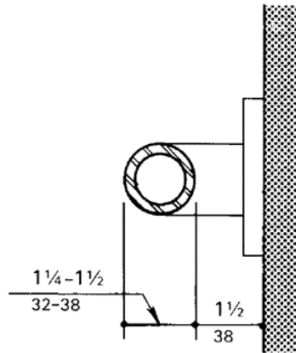


Figure 6-24 Size and Spacing of Grab Bars

Source: CABO/ANSI A117.1-1992, Reprinted with permission

1.5in(38mm) (according to figure 6_24).

2009, *Plumbing Engineering Design Handbook - A Plumbing Engineer's Guide to System Design and Specifications, Volume 1 - Fundamentals of Plumbing Engineering - 6.5.9 609 Grab Bars*. American Society of Plumbing Engineers (ASPE), from <https://app.knovel.com/hotlink/pdf/id:kt0096SUZ1/plumbing-engineering-2/609-grab-bars> (Accessed 09/16/21)

2. It would be helpful to get some statistics on the size of the **civil, social & youth organizations industry** in the United States.
 - a. What is the revenue in \$ of the civil, social & youth organizations industry in the United States in 2021?

Key Statistics

\$19.6BN
REVENUE

Annual Growth 2016–2021
1.2%

Annual Growth 2021–2026
1.7%

Annual Growth 2016–2026



The revenue in 2021 is 19.6 BN dollars.

- b. What is the profit in \$ of this industry in 2021?

 **\$763.6M**
PROFIT

Annual Growth 2016–2021

-6.9%

Annual Growth 2016–2021



The profit in 2021 is 763.6 M dollars.

CITATION:

IBIS World, <https://my.ibisworld.com/us/en/industry/81341/industry-at-a-glance#key-statistics-snapshot>

(US Industry report on civic, social, & youth organizations, accessed September 15th, 2021)

3. You need to find a partner to help develop and commercialize (hopefully) your new idea for a social media platform. An industry expert has suggested to you that **Facebook, Inc.** might be a potential partner. Before contacting them, learn more about Facebook, Inc.

Uncover the following facts about the company's operations:

- a. The year when the company was founded or incorporated (or changed ownership)
2004

Facebook, Statistics and Stats <https://www.statista.com/topics/751/facebook/>
(Accessed 09/16/21)

- b. The address of their headquarters
1601, Willow Road Menlo Park, CA 94025 USA
Facebook, Inc.

<https://orbis.bvdinfo.com/version-2021827/orbis/1/Companies/report/Index?format=standard&BookSection=PROFILE&seq=0> (Accessed 09/16/2021)

- c. Total number of employees worldwide (i.e., all sites, if possible)
58604

Number of Full-Time Facebook Employees from 2004 to 2020
<https://www.statista.com/statistics/273563/number-of-facebook-employees/>
(Accessed 09/16/21)

d. Latest revenue (sales) figures

85965 million

Facebook Revenue and Net Income from 2007 to 2020

<https://www.statista.com/statistics/277229/facebooks-annual-revenue-and-net-income/> (Accessed 09/16/21)

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

7375

Facebook, Inc.

<https://orbis.bvdinfo.com/version-2021827/orbis/1/Companies/report/Index?format=standard&BookSection=ACTIVITIES&seq=0> (Accessed 09/16/2021)

4. You would like to learn more about **inclusive design**, 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 **inclusive design**, 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.

Clarkson, John. *Inclusive Design : Design for the Whole Population* . London ;: Springer, 2003. Print.

1. Available at Library Storage Annex
2. TA174.I464

b. To find more specific information, you want to read a scholarly article on the narrower topic of **inclusive design of packaging or containers**.

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 you used to find the citation.

- Liu, Xiaoxiao. "The Application of Universal Design Concept in Modern Packaging Design." *Advances in Social Science, Education and Humanities Research*. Vol. 69. Netherlands: Atlantis Press, 2016. 1436–1439. Print.
 - Used web of science to find article.

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 print version of article, but there is electronic version of article.

5. 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 an **electronic greeting card**.

5. US utility patent for electronic greeting card

a. Patent Title: Electronic Greeting Card

b. Patent Number: US 8,950,093 B2

c. Assignee: American Greetings Corporation,

Inventor: Josef A. Mandelbaum, Rajiv Jain, Allison Marsh, Kimberly Bikowski, Cathy Tasse, David Mayer, Eliza DeVogel, Katalina Speck, Mary McClain, Sharon Bogdanski, Melinda Leeders, Catherine Gruntman

d. Patent Classification Codes:

G09F1/04 Folded cards

B42D15/022 Postcards; Greeting, menu, business or like cards; Letter cards or letter-sheets combined with permanently fastened sound-producing or light-emitting means or carrying sound records

B42D15/042 Foldable cards or sheets

B42D15/045 Multi-part cards or sheets, i.e. combined with detachably mounted articles

G09F1/06 Folded cards to be erected in three dimensions

G09F27/00 Combined visual and audible advertising or displaying, e.g. for public address

e. Where did we find this?

patents.google.com via MIT Libraries database.

Mandelbaum, Josef A., et al., inventors. *Electronic Greeting Cards*, 10 Feb., 2015, United States Patent US 8,950,093 B2. *Google Patents*, www.google.com/patents/US8950093B2. Accessed 15 Sep. 2017.