

Engineering Notebook

Engineering Notebook
Number

First Name

Last Name



Your Picture
Here



ASK

IMAGINE

PLAN

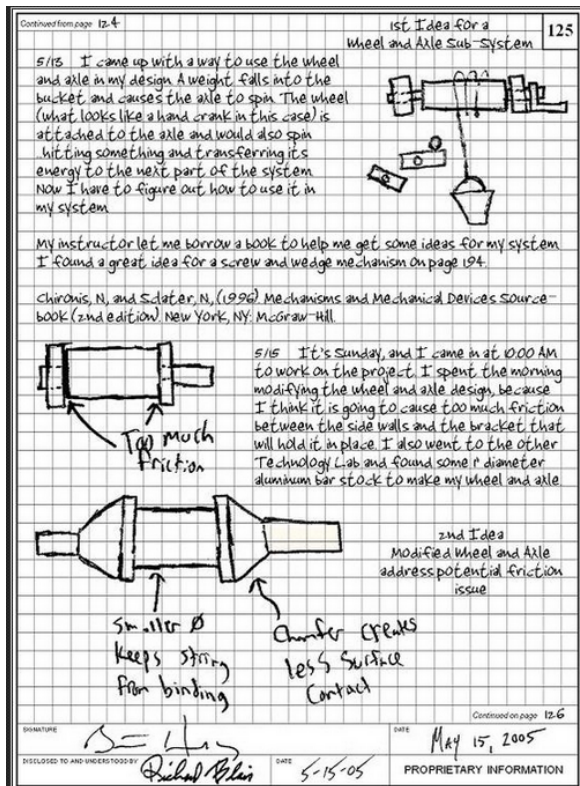
CREATE

IMPROVE

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• _____	
• _____	

WHAT IS AN ENGINEERING NOTEBOOK?



An Engineering Notebook is a bound book used to record ideas, notes, experimentation records, observations, and all work details. It is a technical diary of an engineer's work. It may also be used as a legal document for a patent or legal records.

"Engineering Notebook - Gateway To Technology." *Gateway To Technology*. N.p., n.d. Web. 20 Oct. 2012. <<http://gatewaytotechnologyscms.weebly.com/engineering-notebook.html>>.

HOW DO I KEEP AN ENGINEERING NOTEBOOK?

1. Write NEATLY - anyone should be able to read it.
2. Write down EVERYTHING AS IT HAPPENS.
 - If it is not documented, it did not happen.
 - If you write it the next day, it did not happen.
3. Use BOTH sides of a page.
4. Date each entry in chronological order and number the pages.
5. Clearly separate each day's entry by drawing a line under the entry.
6. Entries should include enough information so someone else could successfully duplicate your work.
 - Label figures and sketches.
 - Use complete sentences.
7. Draw a single line through any errors and enter the correct information nearby . . . it is o.k. to erase sketches.
8. Never leave blank spaces - simply "X" out any blank spots.
9. Never, under any circumstances, remove pages from your notebook.
10. If you add pages, tape or glue it onto a page in your notebook. Clearly label it, date it, and label the page number.

DESIGN PROCESS

Engineers also use the Design Process. The process has steps that engineers use to guide them as they solve problems. Many models of this process exist. This notebook uses the Engineering is Elementary five step model*. The steps are Ask, Imagine, Plan, Create, and Improve. Use the questions in each step to guide you as you solve your problem.

ASK

- What is the problem?
- What have others done?
- What are the constraints?

IMAGINE

- What are some solutions?
- Brainstorm ideas.
- Choose the best one.

PLAN

- Draw a diagram.
- Make lists of materials you will need.

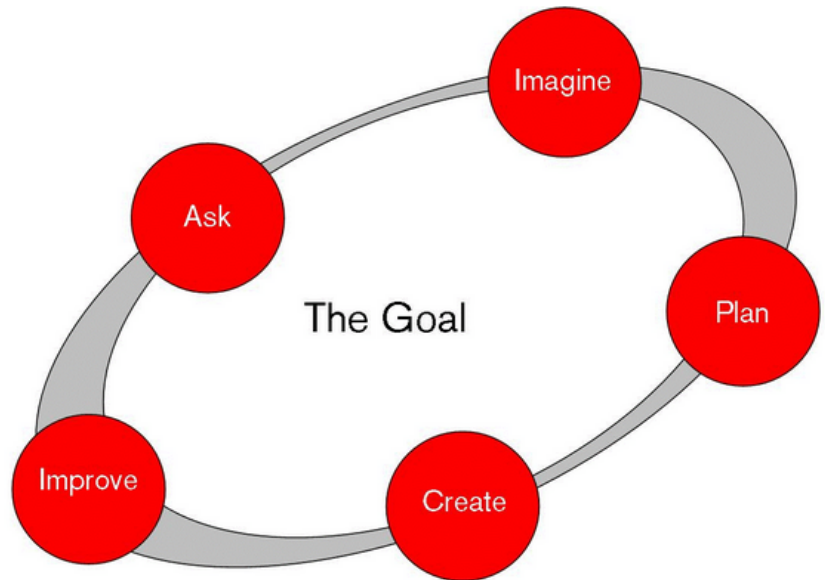
CREATE

- Follow your plan and create it.
- Test it out!

IMPROVE

- Talk about what works, what doesn't, and what could work better.
- Modify your design to make it better.
- Test it out!

After you improve your design once, you may want to begin the Engineering Design Process all over again to refine your technology. Or you may want to focus on one step. The Engineering Design Process can be used again and again!



• "Engineering Design Process." *Engineering Is Elementary*®. N.p., n.d. Web. 20 Oct. 2012. <http://www.mos.org/eie/engineering_design.php>.

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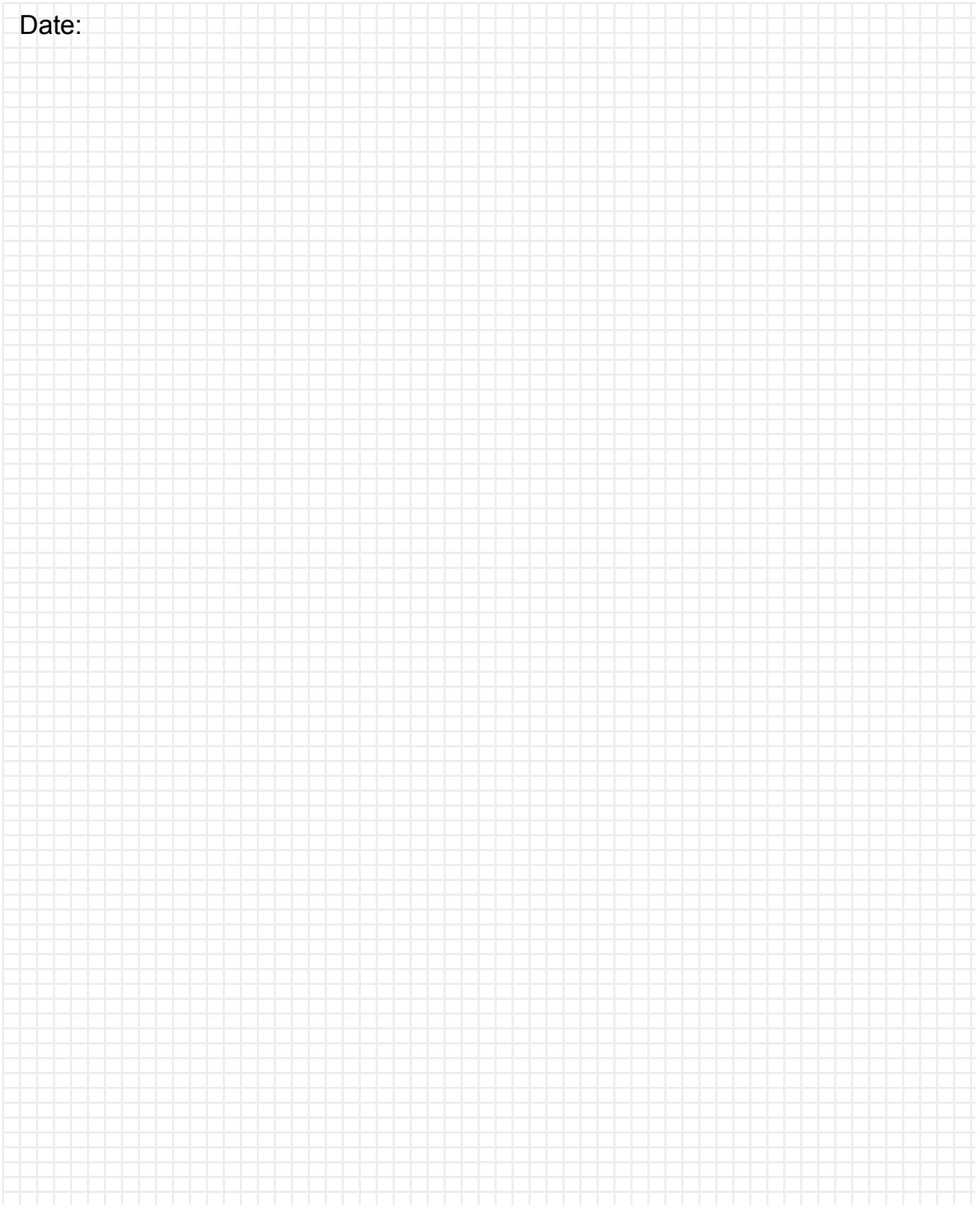
Continue to use the Design Process

- Use the questions in the Design Process to guide you as you solve the problem.

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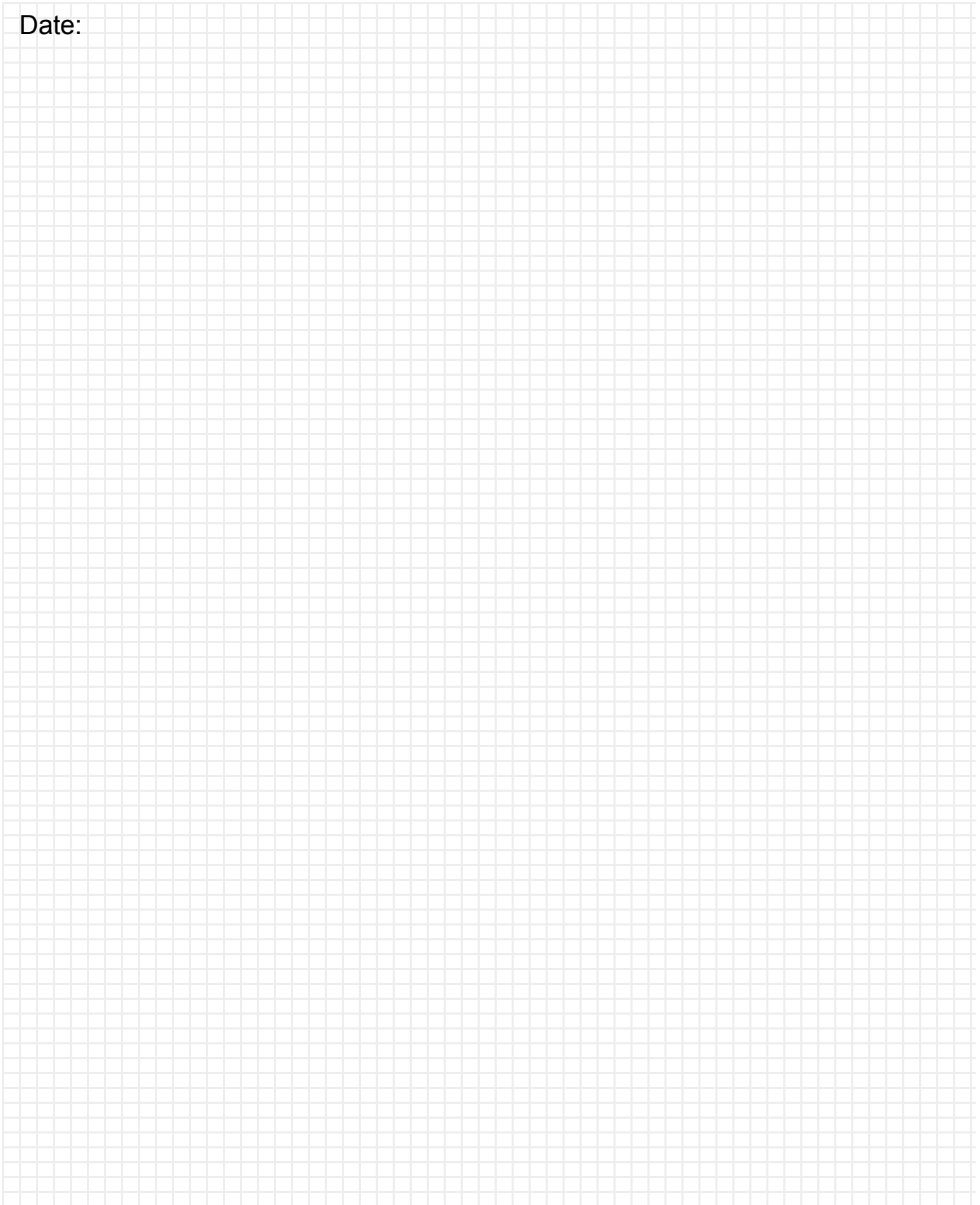
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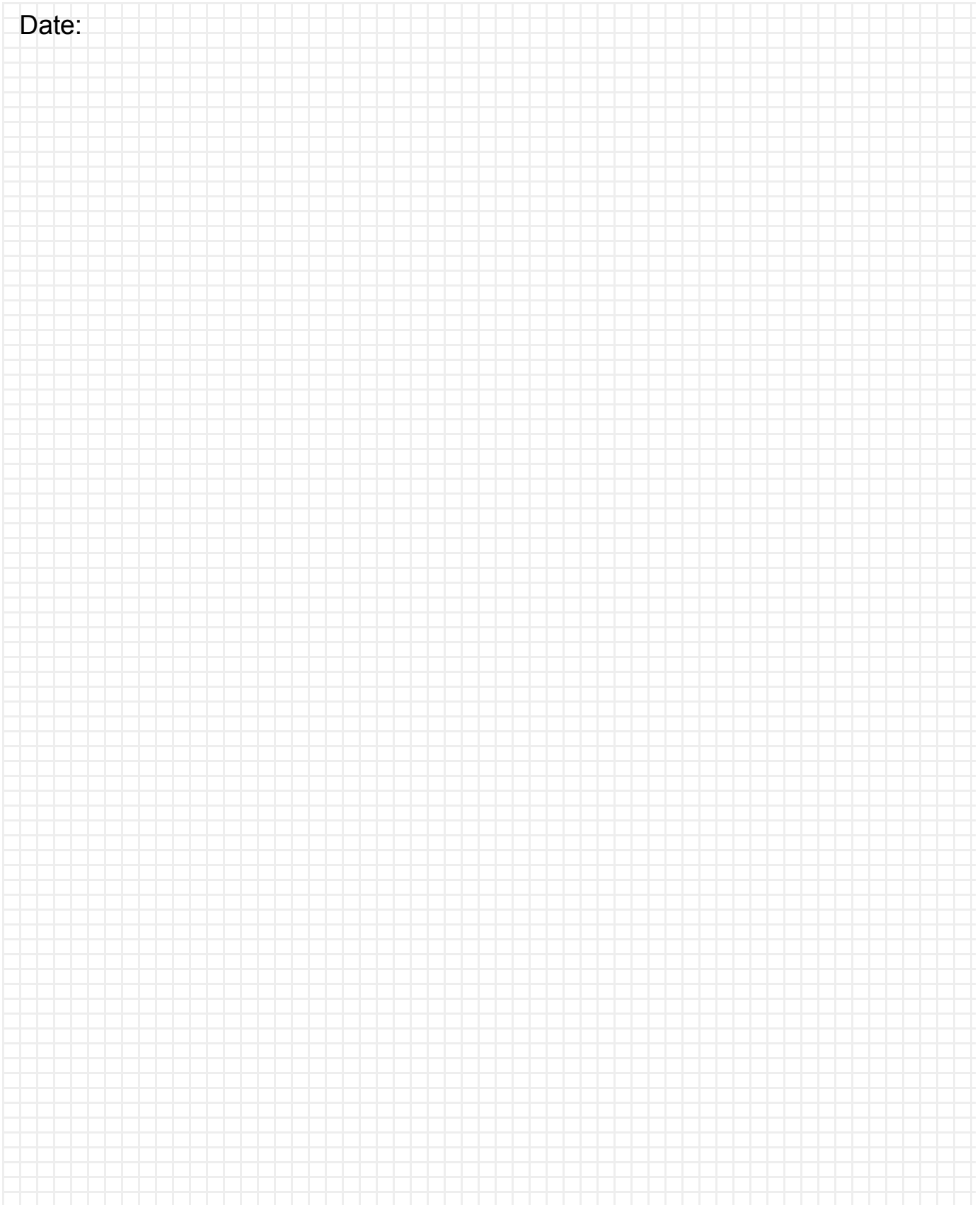
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A large grid of graph paper for taking notes, consisting of a 30x30 grid of small squares. The grid is intended for writing or drawing.

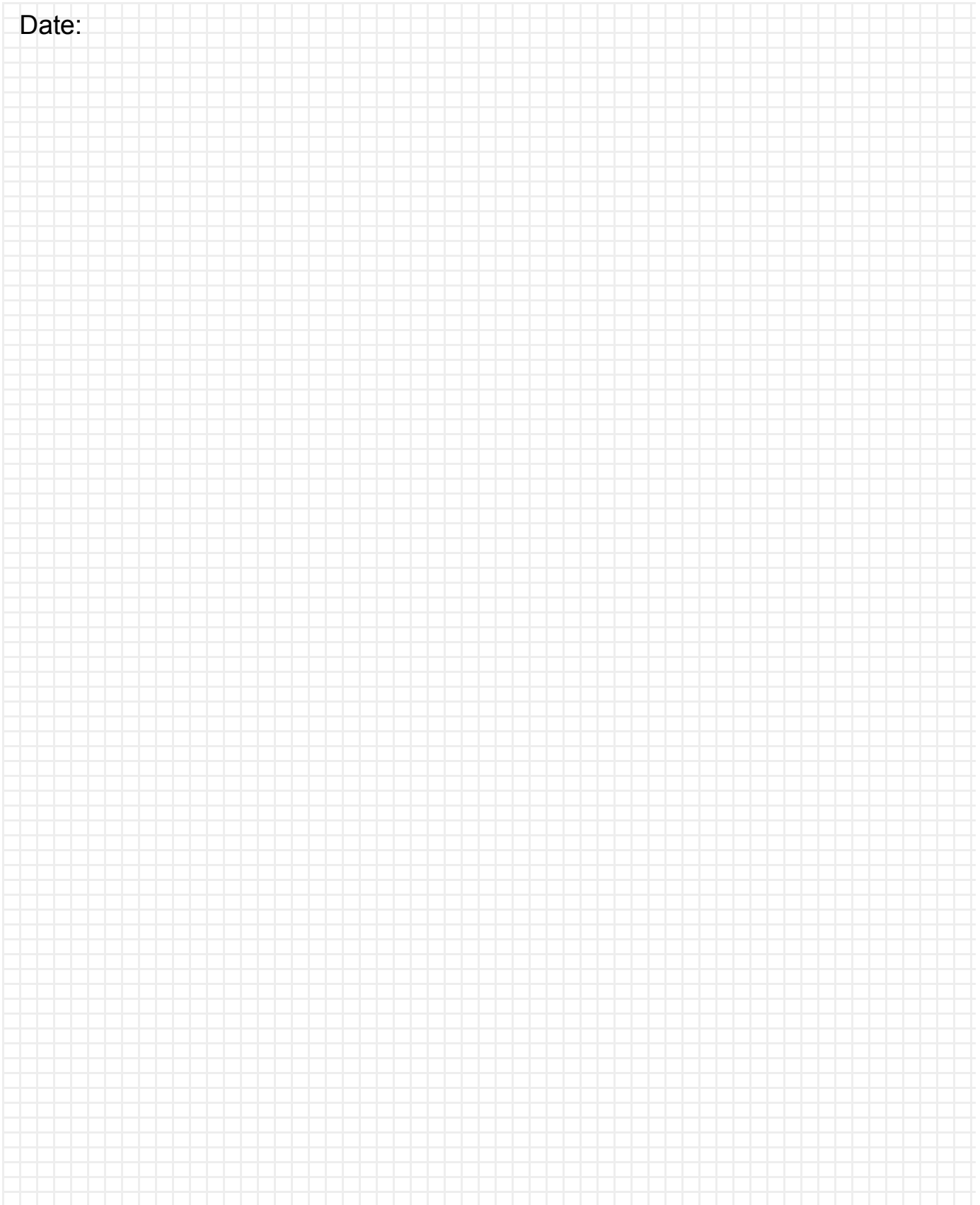
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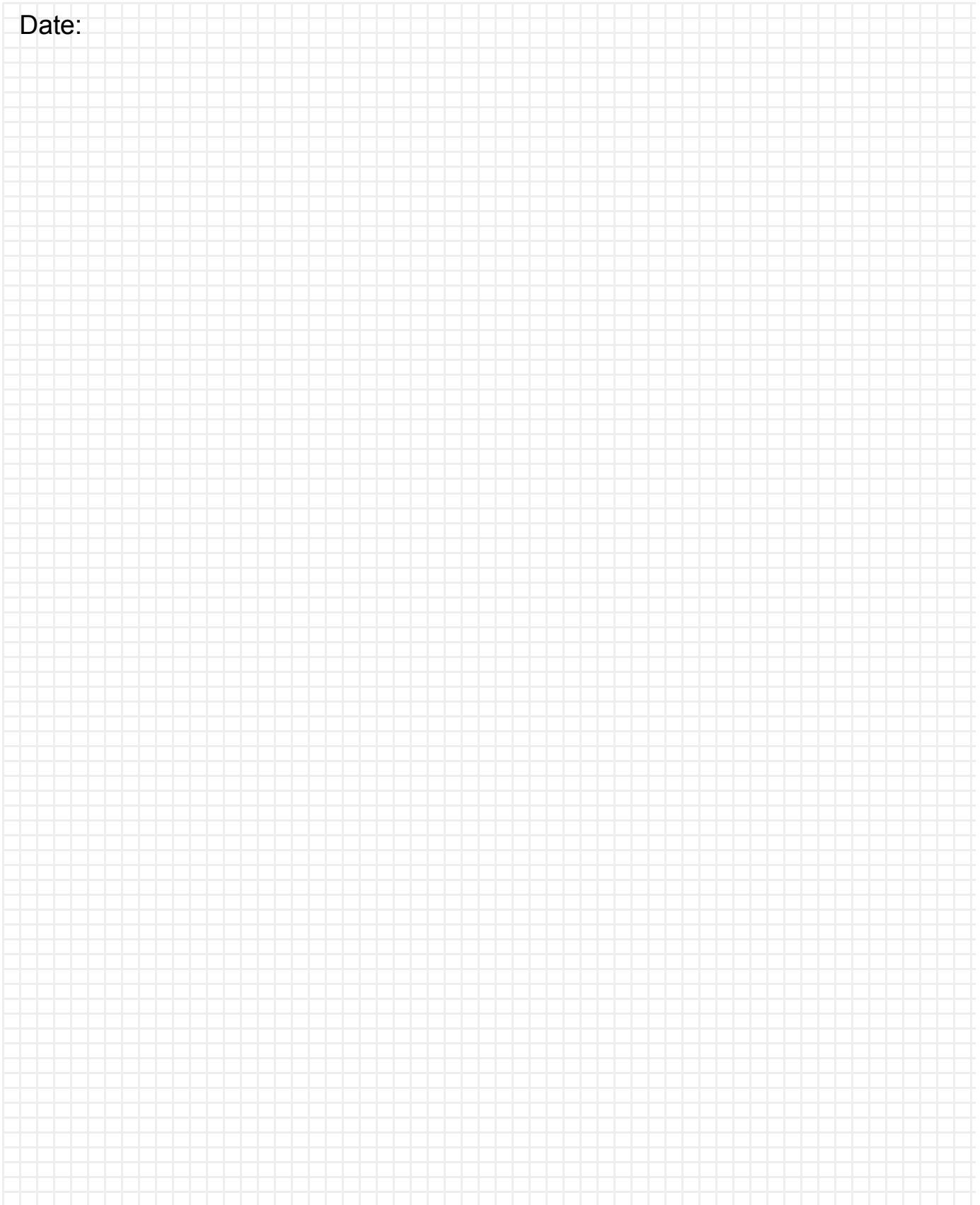
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This is your last page. If you need more pages, copy this page and tape it into your Engineering Notebook.