

Dear Integrated Math 7 student,

My name is Ms. Hekker and I am excited to be teaching you next year. The purpose of this letter is to tell you a little bit about myself and to explain some work I'd like you to do during the summer - ugh, right?

2020-2021 will be my 17th year teaching at Nyack Middle School, but my ties to Nyack are deeper than that! I grew up in Nyack and graduated from Nyack High School a loooong time ago. I moved out of Nyack for a while (my older kids went to North Rockland High School) but now I'm back - my youngest



child graduated from NHS. My hobbies and interests include reading, crossword puzzles, country music, crocheting, and of course, ANYTHING to do with keeping current with my five children. (A lot of the pictures I've added to this letter represent their jobs and interests - see if you can guess what some of them are)



And I look forward to learning about you and your interests.

The work here represents the most important concepts that I want you to bring into September:

- Operations involving whole numbers, fractions and decimals
- Solving one-step equations
- Graphing



It's possible that you'll sail through this assignment with no problem. Chances are, you'll have a question or two along the way. Feel free to consult your own resources (help from a parent or older sibling, Google a topic) or reach out to me for help with a topic or locating good videos or notes.

1. The Schoology class you accessed to take the placement test will remain active for the summer. This is where you will go to find:
 - a. an additional copy of this assignment, if you lose this one.
 - b. announcements, updates or corrections
 - c. answers to these problems (posted toward the middle of the summer)
2. Work these problems **without a calculator**. It is not necessary to print the pages. It is fine to show work and answers on separate paper. Clearly number each problem.

3. Compare your responses with mine. Don't just check answers; make sure you are showing sufficient work. The specific steps don't need to be exactly like mine, but you should be showing similar amounts of work.
4. If you have any questions or concerns at this point, you or your parents can email me.
5. Since we do not know what school will look like in September, I cannot announce specifics regarding an assessment on these skills just yet. As soon as I can, I will email and post information in Schoology about how we'll be assessing your mastery of these two big topics. If the summer work went smoothly for you, you should not be worried about this assessment. The purpose of the summer work is to prepare you for the assessment
6. If a student does not show mastery on this assessment, I will set up a parent-student conference.



Once again, if you have any questions along the way, please do not hesitate to get in touch with me. I will be checking my school email - rhekker@nyackschools.org - regularly and will get back to you quickly. Even if you don't have questions or problems, I'd love to hear from you.

As you know, this assignment is a requirement for being in Integrated Math 7. Although it won't be checked directly, your performance on the September assessment will give me a good indication of the skills you are bringing to 7th grade.

I hope you have a terrific summer vacation -

- Ms. Hekker

PS: Please see the next page for information about supplies for class next year



This is what I sent last year, and I expect that we WILL be returning to school at some point, so this is what you'll need *eventually*.

Supply list for Integrated Math 7 class

Must have: 3-ring binder (it's ok to share it with other classes)
Paper
Pencils and sharpener (or mechanical pencils)

Nice to have: Ruler (6 inches is fine) for graphing straight lines
Graph paper*
Calculator**

*Rulers, graph paper and calculators will always be available for use in class. I expect that any graph assigned for homework will be done on graph paper, so it may be nice to keep a supply at home. Alternatively, students can take a sheet or two with them in class to use for homework.

As far as calculators go: 7th grade will be using scientific calculators. It is **not necessary to purchase a calculator. I will expect all students to have access to a scientific calculator for homework purposes, whether it's an actual calculator or an "app" on a computer or phone.

As I get more information about how we will start in September, I'll let you know what you'll need.

I definitely need to figure out a solution for graph paper and a calculator; I'll likely be researching online options over the summer.



Do not use a calculator



Change each mixed number to an improper fraction

1) $2\frac{1}{3}$

2) $1\frac{5}{11}$

3) $6\frac{99}{100}$

4) $3\frac{4}{7}$

Change each improper fraction to a mixed number

5) $\frac{11}{3}$

6) $\frac{25}{13}$

7) $\frac{101}{99}$

8) $\frac{59}{7}$

Show each fraction in simplest form

9) $\frac{2}{6}$

10) $\frac{5}{125}$

11) $\frac{3}{81}$

12) $\frac{2}{32}$

13) $\frac{6}{34}$

14) $\frac{12}{96}$

15) $\frac{36}{54}$

16) $\frac{22}{63}$

Perform the indicated operation. Show each result as a mixed number in simplest form.

17) $\frac{1}{15} + \frac{16}{15}$

18) $5 + \frac{5}{3}$

19) $\frac{2}{5} + \frac{1}{10}$

20) $\frac{2}{5} + \frac{1}{7}$

Do not use a calculator



21) $\frac{3}{7} + 2\frac{1}{7}$	22) $\frac{1}{6} + \frac{5}{18}$	23) $\frac{1}{2} + \frac{1}{3} + \frac{1}{4}$	24) $2\frac{4}{14} + 1\frac{2}{3}$
25) $5 - \frac{14}{9}$	26) $\frac{3}{4} - \frac{1}{2}$	27) $\frac{2}{3} - \frac{1}{7}$	28) $\frac{3}{10} - \frac{1}{9}$
29) $\frac{1}{3} \cdot \frac{2}{5}$	30) $\frac{1}{11} \cdot \frac{2}{9}$	31) $1\frac{1}{2} \cdot 2\frac{2}{3}$	32) $\frac{5}{3} \cdot \frac{3}{16}$
33) $3\frac{1}{2} \cdot 2\frac{3}{7}$	34) $\frac{7}{16} \cdot \frac{8}{28}$	35) $\frac{1}{9} \div \frac{2}{5}$	36) $\frac{3}{7} \div \frac{1}{2}$
37) $\frac{7}{9} \div \frac{4}{5}$	38) $\frac{6}{7} \div \frac{2}{3}$	39) $6 \div \frac{4}{5}$	40) $1 \div \frac{7}{9}$

Evaluate each expression. Show all answers in simplest form

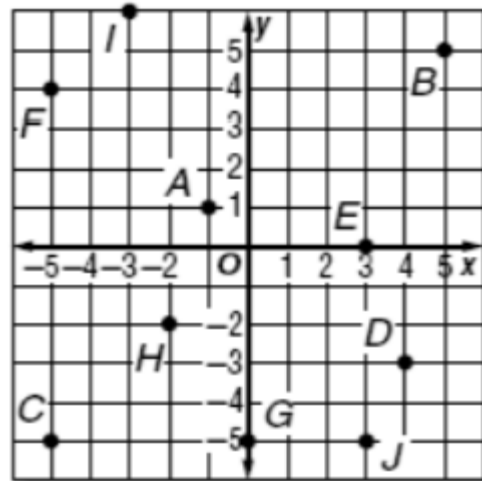
41) $2 + 6 \times 8 \div 4$	42) $(8 - 5)2 \times 2 + 5$	43) $10 - 8 \div 6(2 + 4)^2$	44) $2 \left[5 + \left(3 \cdot \frac{1}{6} \right) \right]^2$
45) $4^3(5) + 2(11)$	46) $2^5 - 4^2 \div 2^2$	47) $\left(\frac{3(6)}{17 - 5} \right)^3$	48) $4 \times 6^2 \div 3 + 7$

Do not use a calculator



49) $\left(\frac{27-12}{8-3}\right)^3$	50) $(4 \cdot 5^2)^3$	51) $\left(\frac{2}{3}\right)^3 - \left(\frac{2}{3^3}\right)$	52) $\frac{4+3^4}{2^4+1}$
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Use the graph to answer the following questions



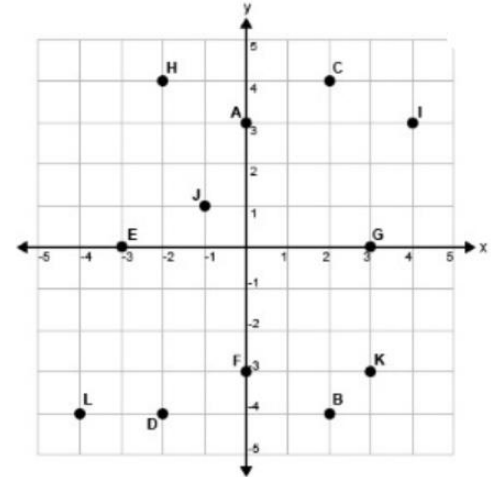
Give the coordinates of the point indicated

53) A (__, __)	54) J 55) (__, __)	56) B 57) (__, __)	58) G 59) (__, __)
60) E (__, __)	61) 2 units below F (__, __)	62) 3 units left of C (__, __)	63) 4 units above I (__, __)

Do not use a calculator



Use the graph to answer the following questions



Give the letter of the point indicated

64) $(-3, 0)$

65) $(2, -4)$

66) $(0, 3)$

67) $(-2, 4)$

Solve each equation

68) $x + 5 = 21$

69) $x - 7 = 113$

70) $3x = 20$

71) $\frac{x}{4} = \frac{1}{3}$

72) $\frac{2}{3}x = 40$

73) $\frac{2}{3} + x = \frac{5}{7}$

74) $\frac{x}{5} = \frac{16}{25}$

75) $\frac{3}{4}x = \frac{51}{20}$