Dear Students and Parents:

This summer, we want you to relax and have fun with your family and friends! We want you to use this time during the summer to recharge!

Please use the web-based IXL program over the summer, to stay current in your fundamental math skills. As a heads-up, your teacher next year will require you to work on these IXL skills in September. The purpose of this practice, over the summer and in September, is to strengthen and deepen content knowledge while maintaining fluency in prerequisite skills.

Below are directions for a “summer math workout”

- To access IXL, go to https://www.ixl.com/signin/mtps To sign in, click the blue “Sign in with Google” button.
- Click on the Math tab on the top green ribbon.
- Click on the Grade 8 tab on the left.
- **Very important: Remember to login before starting your work to keep track of your progress.
- Students should aim to achieve a SmartScore between 75 and 90 points on each skill. The SmartScore can be found on the right hand side of the screen in the skill practice window. By all means, aim for mastery of the skill (a SmartScore of 100).
- It would be helpful for you to keep a log of your work that you will bring in to class early in September.
- Listed on the reverse side of this page are the essential math skills that you should practice during the summer. If you would like to practice different skills, feel free to practice them but remember to focus on the essential skills listed below. (Skills are listed by their title not skill number, as sometimes the skills numbers change during the summer as IXL updates their product.)

Please keep the following in mind:

- If you hit a snag and start getting problems incorrect, make sure you check the steps of the solution before giving up entirely. You can also find help online https://tinyurl.com/oq979q9
- You do not have to reach between 75 and 90 Smartscore points in one session because the program keeps a record of your score so that you can come back to any skill at any time.
- Check to be sure that you are typing your answer correctly. If you get a problem wrong, check to see if you have typed the answer the way IXL prefers.
  - Examples of some answers that will be marked wrong if incorrectly typed:
    - When typing an answer to a division problem, be sure to not add a 0 in front of the answer; for example, 056.8 instead of 56.8.
    - When typing a mixed number be sure to type the whole number THEN space THEN the fraction: example 1 ½. There should be a space between the 1 and the ½.
- Because the site saves all student results, progress can be monitored at any time by clicking on the Reports tab at the top of the page.
Essential Math Skills for Algebra 1

Click on the Grade 8 tab to find these skills:

- Classify Numbers (A.8)
- Evaluate numerical expressions involving integers (C.8)
  (If you are having trouble with this topic, practice C.3 add and subtract integers and C.7 multiply and divide integers)
- Add and Subtract Rational Numbers (E.2)
- Multiply and Divide Rational Numbers (E.5)
- Evaluate expressions using properties of exponents (F.12)
- Solve Proportions (H.10)
- Identify Equivalent Linear Expressions (V.17)
- Solve equations: mixed review (W.11)
- Solve multi-step inequalities (X.8)
- Find the slope of a graph (Y.1)

**Enrichment skills:**
- Write a linear equation from a graph (Y.8)
- Solve a system of equations by graphing (AA.2)
- Solve a system of equations using substitution (AA.8)
- Add and Subtract Polynomials (BB.4)

If you have any questions, please feel free to email Danielle Poleway, Mathematics Supervisor, at dpoleway@mahwah.k12.nj.us

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