HSML Pre-Pre-Algebra Course Preparedness Test

High School Math Live wants parents to be well informed. We want your student to be placed in the appropriate course so that they will be successful and challenged while learning the beauty of mathematics. The questions we have below will be a good indicator to whether your student is ready for Pre-Pre-Algebra. Completing approximately 80% correctly is a good sign that your student is ready for this course. If your student struggles with the majority of the questions, then you and your student will need to discuss your plans. Will your student simply need to allow more time for math this year? Will your student need a private tutor? Will your student put forth the effort needed in order to be successful? We cannot answer these questions for you, but we want you to know prior to the school year what skills are needed for this course.

The answer key is provided at the end of the document. We ask that you sit down with your student and discuss their work. It is very important that you are aware of their results so that informative decisions can be made. After completing these problems, if you find that there are concepts that your student has not mastered, our Brush Up on Math workshops would be a great way to get targeted help on those concepts. If you feel that input from an instructor of the course would be helpful, please scan their work and answers, making sure that the answers are in the same order as the problems on the document. The scan should be emailed as a single PDF document to support@highschoolmathlive.com.

Please view our website, www.highschoolmathlive.com, to read other details including what makes a successful HSML student and online learner.

For these questions, no calculator should be used.

Part 1. Simplify the following.

1. $7.5 + 2.15$

2. $13.2 - 5.36$

3. $246 - 38$

Part 2. Rounding

1. Round 4145 to the nearest hundred.

2. Round 1.563 to the nearest whole number.

3. Round 81.48 to the nearest tenth.

Part 3. Order these set of numbers in order from least to greatest.

421.41   501   632   508   421.647
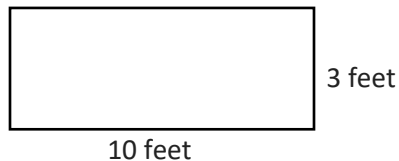
Part 4. Fractions/Decimals

1. What mixed fraction is equal to 14.25?

2. What is the improper fraction for $3\frac{3}{8}$?

3. What is the decimal that is equal to $4\frac{7}{100}$?

4. What is the decimal that is equal to $\frac{2}{5}$?

5. What is the least common denominator for $\frac{3}{4}$ and $\frac{2}{3}$?
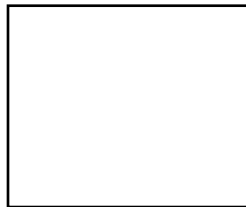
Part 5. Miscellaneous Problems

1. If you can paint 4 walls in a house per day, how long will it take you to paint 16 walls?

2. Laura received 400 emails in a week. Her sister, Kathy, received 231 emails that same week. How many more emails did Laura receive than Kathy?

3. I was paid $32.10, $12.25 and $8.02 for some work on a website development. What was my total pay for this work?

4. I want to redecorate my bedroom. Earlier, I bought 9 feet of a border. I have used $2\frac{1}{2}$ feet already. How much do I have left over to redecorate my room?

5. If I purchased a used video game for $4.48 and gave the cashier $10, how much change did I receive?

6. I will be making $4\frac{1}{2}$ inch cloth strips to go along one edge of a quilt. My quilt edge measures 81 inches. How many strips will I use if they are placed end to end along the edge?

Part 6. Geometry

1. What is the area of this rectangle?

3 feet

10 feet

2. The figure is a square with side length 5 inches. What is the perimeter of this square?

Answer Key:

Part 1
1. 9.65
2. 7.84
3. 208

Part 2

1. 4100
2. 2
3. 81.5

Part 3

421.41 421.647 501 508 632

Part 4

1. $14\frac{1}{4}$
2. $\frac{27}{8}$
3. 4.07
4. 0.4
5. 12

Part 5

1. 4 days
2. 169 emails
3. $52.37
4. 6.5 feet
5. $5.52
6. 18 strips

Part 6

1. 30 ft^2
2. 20 in