

Algebra I Summer Work Packet

It is important to have a strong set of basic math skills to be successful in Algebra I. This includes multiplication facts, division facts, and knowing how to add, subtract, multiply and divide fractions, integers, and decimal numbers. We will use these skills on a daily basis!

This summer, you will be working through Chapter 0: Preparing for Algebra in our textbook. You are responsible for taking care of the Algebra I textbook over the summer and returning it in good condition on the first day of school in August.

You are to complete this packet in its entirety, paying close attention to the directions for each section. This packet is due the first day we return from summer break. I will select several problems from each section to count as your first quiz grade.

I will also post videos for each section on Google Classroom that you can reference should you need extra help. You can also email me anytime at denicolak@saseas.org.

Chapter 0: Lesson 2 (Real Numbers) – pages P7 – P10

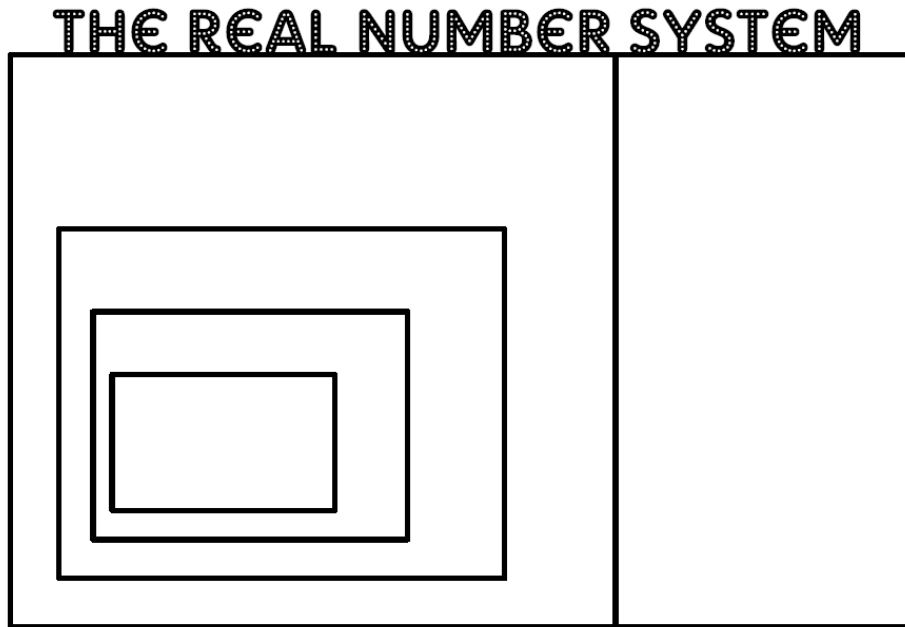
1) Define the following vocabulary terms (you can also use the glossary for this):

- Positive Numbers - _____
- Negative Numbers - _____
- Natural Numbers - _____
- Whole Numbers - _____
- Integers - _____
- Rational Numbers - _____

- Irrational Numbers - _____

- Real Numbers - _____

2) Fill in the chart below with the correct terms. Reference the chart on page P7.



3) On a loose-leaf sheet of paper, complete #1-35 on page P10. Label the top of your paper “**Chapter 0: Lesson 2 – Real Numbers.**” For #13-18, you only need to write the numbers from least to greatest (not graph them). Attach your loose-leaf sheet of paper to this packet.

Chapter 0: Lesson 3 (Operations with Integers) – pages P11 – P12

1) Define the following vocabulary terms (you can also use the glossary for this):

- Absolute Value - _____
- Opposites - _____
- Additive Inverses - _____

2) Complete the table on the next page on integer operations. Provide the rule and at least one example for each operation.

Integer Operations		
Operation	Rule	Example
Adding (Same Signs)		
Adding (Different Signs)		
Subtracting		
Multiplying (Same Signs)		
Multiplying (Different Signs)		
Dividing (Same Signs)		
Dividing (Different Signs)		

3) On a loose-leaf sheet of paper, complete #1-23 on page P12. Label the top of your paper “Chapter 0: Lesson 3 – Operations with Integers.” Attach your loose-leaf sheet of paper to this packet.

Chapter 0: Lesson 4 (Adding and Subtracting Rational Numbers) – pages P13 – P16

1) Fill in the following statements based on the information from the lesson:

- You can use different methods to compare rational numbers. One way is to compare two fractions with _____. Another way is to compare _____.
- You can order rational numbers by writing all of the fractions as _____.

- To add and subtract fractions with the same denominator, add or subtract the _____ and write the sum or difference over the _____.
- To add and subtract fractions with unlike denominators, first find the _____ (LCD). Rename each fraction with the LCD, and then add or subtract. _____ if possible.

2) On a loose-leaf sheet of paper, complete #1-41 on page P16. Label the top of your paper “**Chapter 0: Lesson 4 – Adding and Subtracting Rational Numbers.**” Attach your loose-leaf sheet of paper to this packet.

Chapter 0: Lesson 5 (Multiplying and Dividing Rational Numbers) – pages P17 – P19

1) Define the following vocabulary terms (you can also use the glossary for this):

- Reciprocals - _____

2) Fill in the following statements based on the information from the lesson:

- To multiply fractions, multiply the _____ and multiply the _____. If the numerators and denominators have common factors, you can _____ before you multiply by canceling.
- To divide one fraction by another fraction, multiply the dividend (first fraction) by the _____ of the divisor (second fraction).

3) On a loose-leaf sheet of paper, complete #1-47 EVEN on page P19. Label the top of your paper “**Chapter 0: Lesson 5 – Multiplying and Dividing Rational Numbers.**” Attach your loose-leaf sheet of paper to this packet.

Chapter 0: Lesson 6 (The Percent Proportion) – pages P20 – P22

1) Define the following vocabulary terms (you can also use the glossary for this):

- Percent - _____
- Percent Proportion - _____

2) Answer the following questions based on the information from the lesson.

- How do you write a percent as a fraction?

- What does the percent proportion look like?

3) On a loose-leaf sheet of paper, complete #1-31 EVEN on pages P21-P22. Label the top of your paper “**Chapter 0: Lesson 6 – The Percent Proportion.**” Attach your loose-leaf sheet of paper to this packet.

Chapter 0: Lesson 7 (Perimeter) – pages P23 – P25

1) Define the following vocabulary terms (you can also use the glossary for this):

- Perimeter - _____
- Circle - _____

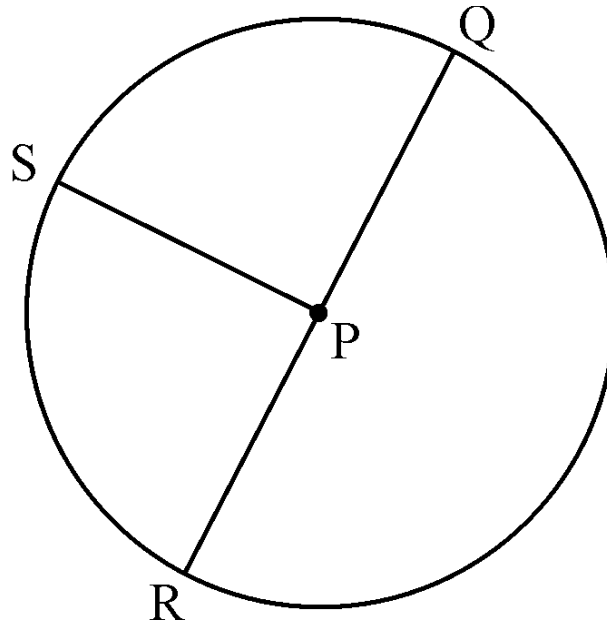
- Diameter - _____
- Circumference - _____

****Calculator Permitted****

Name: _____

- Center - _____
 - Radius - _____
- _____

2) Label the circle below with the following parts: center, circumference, diameter, radius.



3) The formula for the circumference of a circle is _____ or _____.

4) On a loose-leaf sheet of paper, complete #1-20 on page P25. Label the top of your paper “**Chapter 0: Lesson 7 – Perimeter.**” Attach your loose-leaf sheet of paper to this packet.

Chapter 0: Lesson 8 (Area) – pages P26 – P28

1) Define the following vocabulary terms (you can also use the glossary for this):

- Area - _____

2) Complete the table on the next page. Include the appropriate area formula for each figure and a picture with labels.

Figure	Area Formula	Picture (with labels)
Rectangle		
Parallelogram		
Square		
Triangle		
Circle		

3) On a loose-leaf sheet of paper, complete #1-23 on page P28. Label the top of your paper "Chapter 0: Lesson 8 – Area." Attach your loose-leaf sheet of paper to this packet.

Chapter 0: Lesson 9 (Volume) – pages P29 – P30

1) Define the following vocabulary terms (you can also use the glossary for this):

- Volume - _____

2) Complete the table on the next page. Include the appropriate volume formula for each figure and a picture with labels.

****Calculator Permitted****

Name: _____

Figure	Volume Formula	Picture (with labels)
Rectangular Prism		
Cylinder		

3) On a loose-leaf sheet of paper, complete #1-19 on page P30. Label the top of your paper "Chapter 0: Lesson 9 – Volume." Attach your loose-leaf sheet of paper to this packet.

Chapter 0: Lesson 10 (Surface Area) – pages P31 – P32

1) Define the following vocabulary terms (you can also use the glossary for this):

- Surface Area - _____

2) Complete the table below. Include the appropriate surface area formula for each figure and a picture with labels.

Figure	S.A. Formula	Picture (with labels)
Rectangular Prism		
Cylinder		

3) On a loose-leaf sheet of paper, complete #1-18 on page P32. Label the top of your paper "Chapter 0: Lesson 10 – Surface Area." Attach your loose-leaf sheet of paper to this packet.