

**MIDDLE SCHOOL****Summer Math****All 6th Grade Students****Part 1 – June****4 Hours of Aleks for RETURNING STUDENTS ONLY**

Welcome to Cincinnati Country Day School! Please complete this math packet in preparation for 6th grade PreAlgebra. In addition to this packet, all students should also be working on Aleks each week. We ask that every student spends 1 hour per week working through the online math program. For this packet, clearly show your work neatly for each problem. Your process should be organized and easy to follow. All answers should be labeled and in simplest form on the answer sheet. This packet is due the first day of school. Good luck!

Parents: Please sign and date the work when it is completed.

1. $\frac{1}{2} + \frac{4}{5}$

2. $\frac{3}{4} - \frac{1}{3}$

3. $\frac{3}{4} + \frac{2}{3} - \frac{5}{6}$

4. Write the prime factorization of 48.

5. $\frac{5}{7} \times \frac{14}{15}$

Name _____

6. $2\frac{4}{5} \times 1\frac{5}{6}$

7. $\frac{9}{10} \div \frac{3}{5}$

8. $\frac{7}{8} \div \frac{2}{7}$

9. $3\frac{2}{3} \div 1\frac{4}{7}$

10. Write in order from least to greatest: $\frac{9}{10}, \frac{3}{5}, \frac{4}{7}, \frac{5}{9}, \frac{1}{2}$

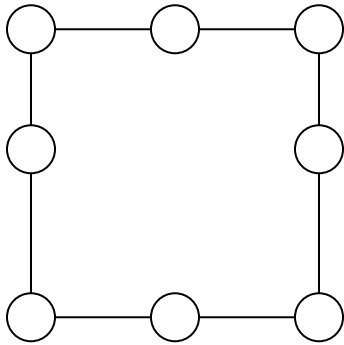
11. Write 100 as the sum of three Prime numbers. Remember 1 is not Prime.

12. What is the area and perimeter square with sides of $2\frac{1}{2}$ feet?

13. Danny, Pat and Kelly each tried to estimate the weight of a giant hot dog at their school fair: Danny's estimate: 59 pounds. Pat's estimate: 94 pounds. Kelly's estimate: 121 pounds. One estimate was off by 16 pounds, another by 19, and another by 43 pounds. How much did the hot dog weigh?

Name _____

14. Place the number 1, 2, 3, 4, 5, 6, 7 and 8 in the eight circles so that the sum of the numbers in any line equals 13.



15. Translate the following expression: The sum of a number and seven.

16. Translate the following expression: The difference of a number and four.

17. Translate the following expression: The product of a number and twelve.

18. Translate the following expression: The quotient of a number and three.

19. Translate the following expression: The sum of $2x$ and six.

20. Translate the following expression: The difference of $3x$ and fifteen.

Name _____

Summer Math

For Entering 6th Grade Students

Part 2 – July

4 Hours of Aleks

1. $2.4 + 3.8$

2. $4.5 - 3.5$

3. $0.2 \div 4$

4. 3.2×4.5

5. $45 \div 0.25$

6. $2 + 3 \times 8 \div 2 - 2$

7. Write 0.16 as a fraction.

8. Write $\frac{3}{8}$ as a decimal.

9. $\frac{4}{5} - \frac{1}{8}$

10. $\frac{3}{5} - \frac{1}{6} + \frac{2}{5}$

11. $\frac{4}{9} \times \frac{3}{8}$

12. $1\frac{2}{33} + 2\frac{3}{5} \div \frac{2}{5}$

13. $3\frac{3}{4} \div 1\frac{1}{2}$

Name _____

14. $c \times 54 = 135$; $c = ?$

15. Write in order from least to greatest: $1\frac{2}{3}, 1\frac{3}{7}, \frac{9}{5}, \frac{3}{2}, 1\frac{5}{4}$

16. What is the reciprocal of $1\frac{3}{4}$?

17. 8^4

18. What is the area of a triangle with a base of 8 inches and the height of 24 inches?

19. Find the mean, median, and mode of 2, 9, 5, 5, 2, 6, 7, 5, 4, 12, 8, 7.

20. Complete the pattern: 2, 4, 12, 48,

Name _____

Summer Math
For Entering 6th Grade Students
Part 3 – August
4 Hours of Aleks

1. $\frac{4}{5} + \frac{2}{9}$

3. $\frac{5}{8} + \frac{2}{15}$

4. $1\frac{3}{4} + 2\frac{3}{5} - 1\frac{1}{6}$

5. $\frac{2}{5} \times \frac{15}{18} \times \frac{1}{3}$

6. $2\frac{2}{3} \div \frac{3}{7}$

7. $\left(1\frac{3}{7} + \frac{1}{4}\right) \div \frac{1}{5}$

8. $\frac{5}{9} + \frac{9}{20}$

9. $\frac{5}{8} - \frac{2}{15}$

10. Complete the pattern: $\frac{1}{2}, \frac{3}{4}, \frac{5}{8}, \frac{7}{16},$ _____, _____, _____

Name _____

11. Complete the pattern: 2, 3, 5, 8, 12, _____, _____, _____

12. Bob is driving at 55 mph. How long will it take him to travel 378 miles?

13. Define the word reciprocal:

14. What is the name of a line that passes through a circle and does NOT pass through the center point?

15. Why do all triangles have two names?

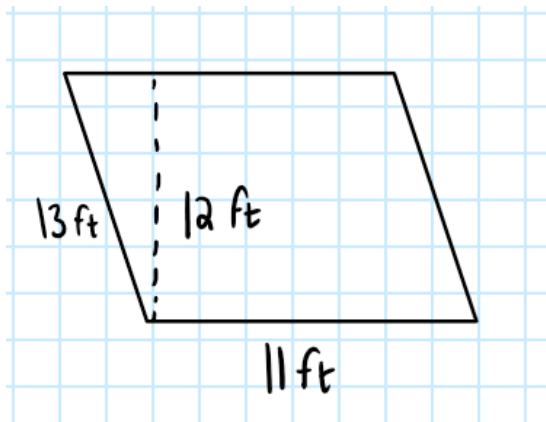
16. What do we call two lines that never cross? Define and draw an example:

17. What do we call two lines that cross and form a 90 degree angle? Define and draw an example:

18. What is three to the fifth power?

Name _____

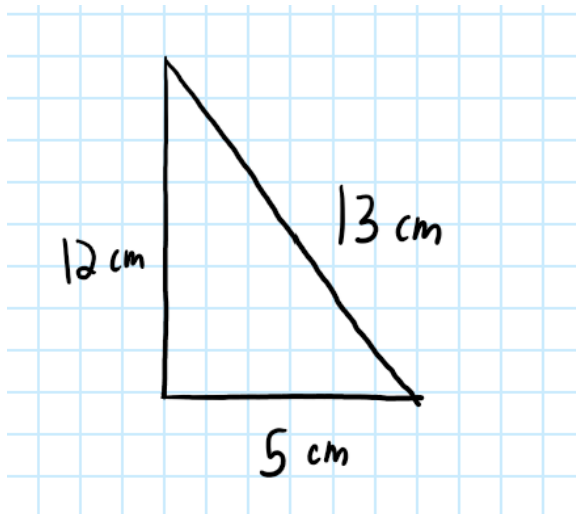
19. Find the perimeter and area of the shape below:



Area _____

Perimeter _____

20. Find the perimeter and area of the shape below:



Area _____

Perimeter _____

Sumer Math Answer Sheet

June

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

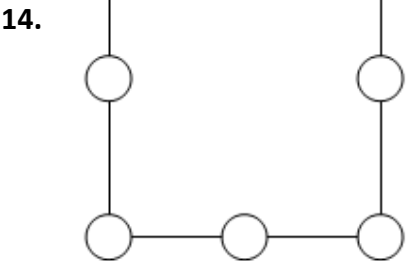
9. _____

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12. _____

13. _____



15. _____

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Name_____

July

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Name_____

August

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