

CP Algebra 1A Summer Packet - VHS

Complete before the first day of school.

You do not need to complete this assignment in one sitting. It's encouraged to complete a little bit at a time.

Do not use a calculator on this assignment. We are interested in seeing what you can do, not what your calculator can do.

This will be collected on the first day of school (not freshmen orientation)

We look forward to seeing you next school year! Welcome to Voorhees High School!

1. Use the digits 1 to 9, at most one time each, to make 5 prime numbers.

, , , ,

2. Find the factors of the following integers:

a. 27

b. 121

c. 80

3. Complete the story problem and answer statement.

a. Problem: *Lucy has _____ apples. She has nine _____ (more/less) than Marcus. How many apples does _____ (Lucy/Marcus) have?*

b. Answer: _____ (Lucy/Marcus) has _____ apples.

4. Use the digits 1 to 9, at most one time each, to make three equivalent fractions.

$$\frac{\square}{\square} = \frac{\square}{\square} = \frac{\square}{\square\square}$$

5. Match each algebraic expression with its verbal description. Place the corresponding letter on the line next to each expression.

$$n^2 - 6$$

A. Multiply n by 2, then add 6.

$$(n + 6)^2$$

B. Square n , then subtract 6.

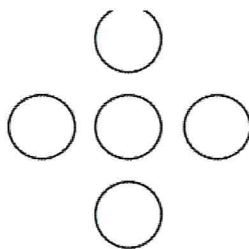
$$2n + 6$$

C. Divide n by 6, then multiply by 2.

$$2\left(\frac{n}{6}\right)$$

D. Add 6 to n , then square it.

6. Place the digits 1, 2, 3, 4, and 5 in the circles below so that the sums horizontally and vertically are equivalent (the same).



7. Complete each multiplication or division problem by filling in the boxes with a number that makes the statement true.

a. $\frac{21}{\square} = 7$

b. $5(\square) = 65$

c. $\frac{1}{2}(\square) = 14$

d. $48 = \frac{\square}{6}$

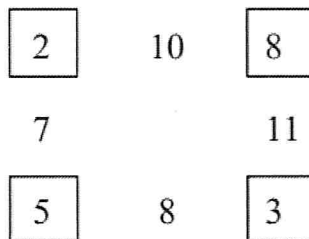
8. Study the sample diagram. Notice that:

$$2 + 8 = 10$$

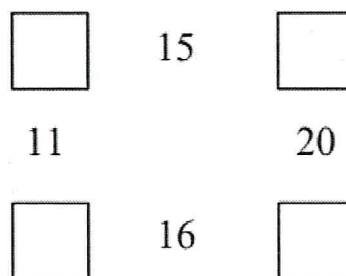
$$5 + 3 = 8$$

$$2 + 5 = 7$$

$$8 + 3 = 11$$



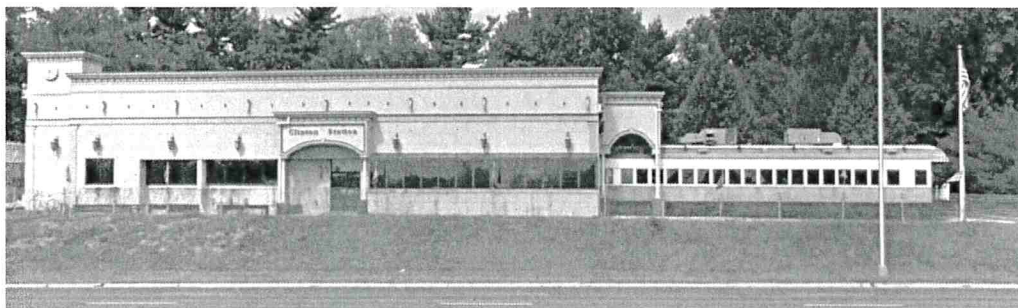
Complete the following diagram so that the same pattern holds:



9. Give an example in which you multiply two numbers and get a product that is less than the original two numbers.

10. Think of one way YOU have used math outside of school (other than homework assignments or studying)!

For example, I used my knowledge of percents to determine how much of a tip to leave my waitress at the Clinton Station Diner!



***Think of something unrelated to my example! Get creative! You use math more than you think!*

11. Solve each equation WITHOUT A CALCULATOR.

a. $-10 = \frac{x}{20}$

b. $17n = -136$

c. $\frac{1}{6} = \frac{p}{4}$

d. $t + 7.8 = 24.4$

e. $-12 = 5y - 8y$

f. $4b + 7b = 3 - 3 - 5b - b$

g. $\frac{73}{42} = x - \frac{2}{3} + \frac{5}{6}$

h. $0.9x - 1.1x = -0.82$