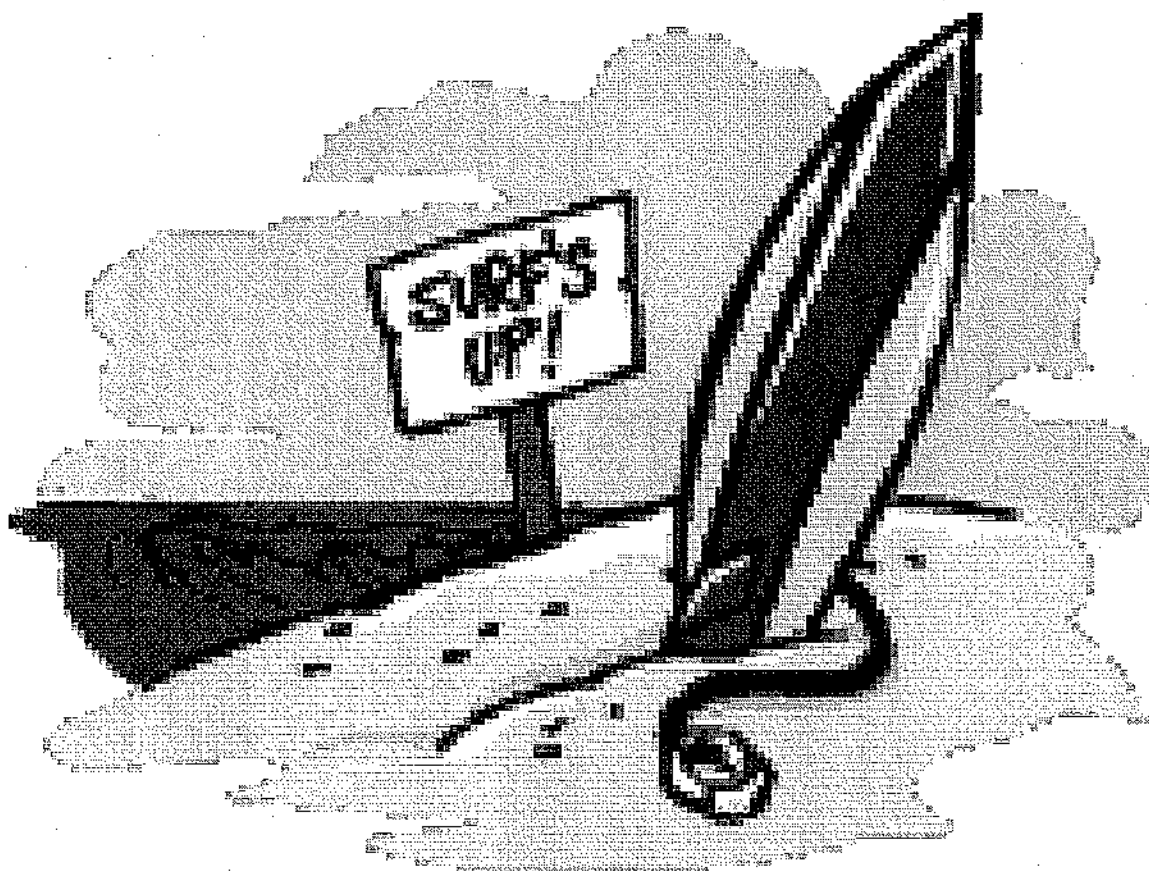


# My 'What-To-Do' when I'm bored this summer Skill Refresher Packet

For students taking ALGEBRA I in the fall

E-mail any questions  
[kgushrowski@mcas.k12.in.us](mailto:kgushrowski@mcas.k12.in.us)



This will be GRADED when school begins in the fall.

Dear Parent/Guardian:

In preparation for next year's Algebra I course, your child is being asked to complete this Skill Refresher Packet over the summer. This is not intended to be time consuming. If your student is having difficulty with a page, please let me know and I can share some resources with you that will help your student master the needed skill. Being well-prepared for the fall will be a great benefit to your student.

This packet will be collected and graded when school starts in the fall.

Sincerely,

Kathleen Gushrowski

[kushrowski@mcas.k12.in.us](mailto:kushrowski@mcas.k12.in.us)

# Diamond Math Problems

Name: \_\_\_\_\_ Date: \_\_\_\_\_



Complete the diamond problems. The top cell contains the *product* of the numbers in the left and right cells, while the bottom cell contains the *sum*.

(1)  $\begin{array}{ccc} -56 & & \\ +7 & \times & -8 \\ & -1 & \end{array}$

(2)  $\begin{array}{ccc} & & \\ +4 & \times & +7 \\ & & \end{array}$

(3)  $\begin{array}{ccc} & & \\ +8 & \times & +12 \\ & & \end{array}$

(4)  $\begin{array}{ccc} & & \\ +4 & \times & +9 \\ & & \end{array}$

(5)  $\begin{array}{ccc} & & \\ -12 & \times & +6 \\ & & \end{array}$

(6)  $\begin{array}{ccc} & & \\ -3 & \times & -4 \\ & & \end{array}$

(7)  $\begin{array}{ccc} & & \\ +13 & \times & -5 \\ & & \end{array}$

(8)  $\begin{array}{ccc} & & \\ +7 & \times & -9 \\ & & \end{array}$

(9)  $\begin{array}{ccc} & & \\ +14 & \times & \\ & 5 & \end{array}$

(10)  $\begin{array}{ccc} & & \\ -7 & \times & \\ & 2 & \end{array}$

(11)  $\begin{array}{ccc} & & \\ -12 & \times & \\ & -3 & \end{array}$

(12)  $\begin{array}{ccc} & & \\ -30 & \times & \\ & -10 & \end{array}$

(13)  $\begin{array}{ccc} & 22 & \\ +2 & \times & \\ & & \end{array}$

(14)  $\begin{array}{ccc} & -28 & \\ & \times & \\ & -7 & \end{array}$

(15)  $\begin{array}{ccc} & 104 & \\ & \times & \\ & +13 & \end{array}$

(16)  $\begin{array}{ccc} & 50 & \\ +5 & \times & \\ & & \end{array}$

(17)  $\begin{array}{ccc} & & \\ & \times & +8 \\ & 13 & \end{array}$

(18)  $\begin{array}{ccc} & 99 & \\ +9 & \times & \\ & & \end{array}$

(19)  $\begin{array}{ccc} & 9 & \\ & \times & \\ & 10 & \end{array}$

(20)  $\begin{array}{ccc} & 56 & \\ & \times & \\ & -18 & \end{array}$

(21)  $\begin{array}{ccc} & 56 & \\ & \times & \\ & 15 & \end{array}$

(22)  $\begin{array}{ccc} & 24 & \\ & \times & \\ & 14 & \end{array}$

(23)  $\begin{array}{ccc} & 126 & \\ & \times & \\ & -23 & \end{array}$

(24)  $\begin{array}{ccc} & -66 & \\ & \times & \\ & 5 & \end{array}$

(25)  $\begin{array}{ccc} & 10 & \\ & \times & \\ & -7 & \end{array}$

(26)  $\begin{array}{ccc} & -4 & \\ & \times & \\ & -3 & \end{array}$

(27)  $\begin{array}{ccc} & 16 & \\ & \times & \\ & 10 & \end{array}$

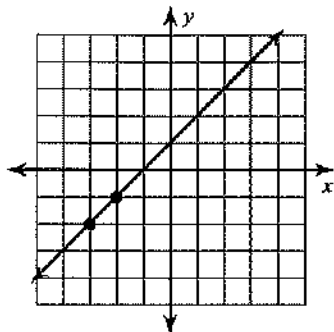
(28)  $\begin{array}{ccc} & 72 & \\ & \times & \\ & -18 & \end{array}$

## Summer Skill Packet - Fall 2020

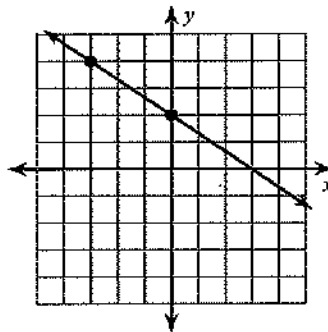
Date \_\_\_\_\_ Block \_\_\_\_\_

**Find the slope of each line.**

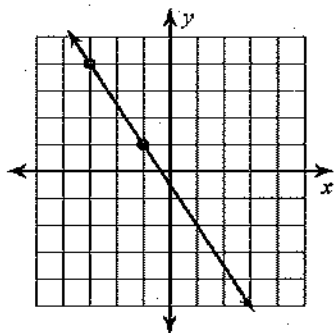
1)



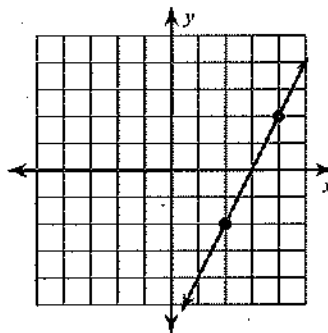
2)



3)



4)

**Find the slope of the line through each pair of points.**

5)  $(-14, 10), (-11, 19)$

6)  $(0, 18), (13, -7)$

7)  $(-14, 19), (-9, -10)$

8)  $(-2, -14), (0, -2)$

9)  $(14, 11), (19, -11)$

10)  $(2, -9), (-7, 8)$

11)  $(-18, -3), (-1, 5)$

12)  $(8, -12), (-17, 18)$

Use the Order of Operations to Simplify. You must SHOW YOUR WORK for credit.

$$13) \frac{26 \cdot 2}{4} + 3 - 14$$

$$14) 14 - \left( 5 - \frac{29 + 1}{10} \right)$$

$$15) 5^2 - (1 + 10 + 3)$$

$$16) \frac{5 \cdot 3}{13 + 2}$$

$$17) 13 \cdot \frac{7 \cdot 5}{15 - 10}$$

$$18) 13 + 6 - 4 + 13 - 6$$

$$19) 12 \cdot 5 - (13 - (11 - 2))$$

$$20) 15 - \left( 14 - \frac{12}{11 - 8} \right)$$

$$21) \frac{36}{8 - (2 + 6 - 4)}$$

$$22) \frac{40 \cdot 2}{4 + 4}$$

$$23) \frac{12}{2} + 13 - (9 - 4)$$

$$24) (8 + 4) \cdot 13 - 4 - 8$$

Solve each equation. You must SHOW ALL WORK for credit.

25)  $84 = 8 + 4(7 - 3x)$

26)  $3(1 + 7a) = 87$

27)  $-8 - 6(4 - 7v) = -116$

28)  $97 = -5x + 2(-4x + 3)$

29)  $-106 = -7(x + 8) - 8$

30)  $95 = 8(-2x - 2) - 1$

31)  $-16 + 8b = -6(4b + 8)$

32)  $v - 3(-8 - v) = 29 + 3v$

33)  $36 + 6x = -7 + 6(x + 6)$

34)  $-23 - 7n = 2(2n - 6)$

35)  $-8(5x + 4) = 4 - 4x$

36)  $20 + 4r = 2r + 5(3r + 4)$