



Algebra 1 Summer Review

(for students who have **completed** Pre-Algebra and are entering Algebra 1)

Reviewing key concepts from Pre-Algebra is an excellent way to be fully prepared for the pace and rigor of Algebra 1. The following packet will help you practice and also self-assess any concepts that you may want to spend extra time on before the start of school. You will take a low-stakes diagnostic quiz on this material to identify any gaps in critical concepts. You will be given additional assignments to help you learn the material until you can demonstrate mastery.

A breakdown of the skills covered in the packet by item number is as follows:

#1- 10 Addition, Subtraction, Multiplication, Division of Integers

#11-12 Order of Operations

#13-16 Solving for a Variable

#17-20 Graphing inequalities

#21-24 Adding like terms, Distributive property

#25-28 Addition, Subtraction, Multiplication and Division of Fractions

#29 Graphing coordinate points

#30 Square roots, Absolute Value

If you would like additional resources to support your practice, we recommend Khan Academy as a great first step. For in-person support, consider a peer tutor or a more structured option such as Mathnasium. For a list of peer tutors who are willing to tutor over the summer for community service hours, please contact Linda Graham, Math Department Chair.

Summer Review

Date _____

Operations with Integers: Evaluate each expression.

1) $(-1) + (-6)$

2) $8 - 3$

3) $6 - 7$

4) $(6)(-9)$

5) $(-3)(-7)$

6) $\frac{63}{-7}$

7) $\frac{-90}{-10}$

8) $4 \div (1 + 1)$

9) $6 + 4 - 3$

10) $(3 \cdot 2)^2$

11) $(5 + 6) \cdot 2$

12) $3 + 4 \cdot 5$

Solving One-Step Equations: Solve each equation.

13) $-20v = -40$

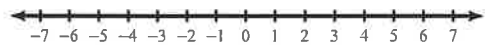
14) $p + 19 = 0$

15) $p - 20 = -31$

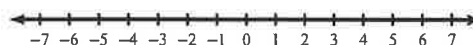
16) $\frac{n}{4} = -20$

Graphing Inequalities: Draw a graph for each inequality.

17) $x \leq -6$



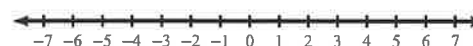
18) $k > -2$



19) $b \geq -1$



20) $x < 4$



Simplify each expression by adding like terms and/or using the Distributive Property.

21) $6v - 8 + 9$

22) $1 + 8n + 2n$

23) $2(-5n + 3)$

24) $-4(x - 7)$

Operations with Fractions: Evaluate each expression.

25) $\frac{3}{4} - \frac{1}{3}$

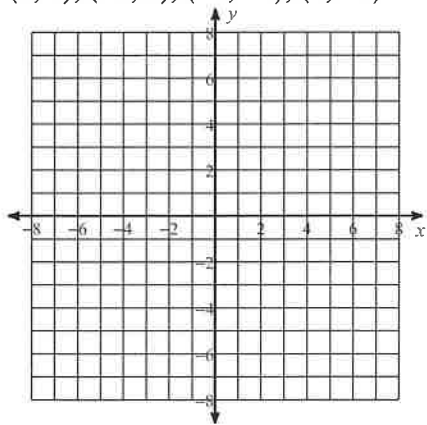
26) $\frac{5}{3} + 3\frac{4}{5}$

27) $\frac{12}{7} \cdot \frac{1}{2}$

28) $\frac{13}{10} \div \frac{1}{2}$

Graphing Points: Graph the following points.

29) $(3, 1), (-5, 6), (-4, -2), (1, -7)$



Evaluate each of the following.

30) $\sqrt{25} =$

$\sqrt{64} =$

$|6| =$

$|-6| =$

Answers to Summer Review

1) -7

2) 5

3) -1

4) -54

5) 21

6) -9

7) 9

8) 2

9) 7

10) 36

11) 22

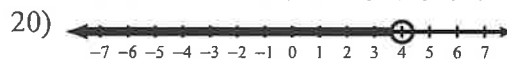
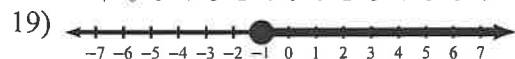
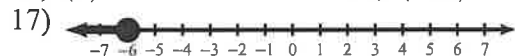
12) 23

13) $\{2\}$

14) $\{-19\}$

15) $\{-11\}$

16) $\{-80\}$



21) $6v + 1$

22) $1 + 10n$

23) $-10n + 6$

24) $-4x + 28$

25) $\frac{5}{12}$

26) $\frac{82}{15}$

27) $\frac{6}{7}$

28) $\frac{13}{5}$

29)

30) $5, 8, 6, 6$

