# INCOMING 7TH GRADE SUMMER MATH SKILLS REVIEW

Welcome incoming students! This packet will help you retain the skills you learned in 6<sup>th</sup> grade so we can continue to build on these when you return in August.

If you are struggling with any of the skills in this packet, please search for the skill topic on www.khanacademy.com or www.virtualnerd.com.

We look forward to meeting you in August!

### INTEGERS:

### Addition:

SAME SIGNS: ADD and keep the same sign

DIFFERENT SIGNS: SUBTRACT the smaller from the larger and give the answer the sign of the larger absolute value.

#### Subtraction:

ADD the opposite of the second number and use the Addition Rule.

### Multiplication and Division:

Product or Quotient of TWO same signs is POSITIVE.

Product or Quotient of TWO different signs is NEGATIVE.

You MUST know how to complete these problems WITHOUT a calculator!

Complete the operations.

# **ORDER OF OPERATIONS**-Perform the operations in the correct order (PEMDAS or GEMDAS) Show you work!

1. 
$$(-1)^3 \cdot 7 + 4 =$$

5. 
$$10 \div 2 \cdot 4 \div 5 =$$

2. 
$$(-6+8) \div -2 =$$

6. 
$$7 \cdot 3 + (2)^3 =$$

3. 
$$8+2 \cdot 6-5=$$

7. 
$$11 + 8(6 - 3) =$$

4. 
$$9-4+2-1+8=$$

8. 
$$12 + 4(8 \div 2) =$$

## ROUNDING DECIMALS

- Round 8.54 to the nearest tenth
- 2. Round 99.59 to the nearest whole number
- 3. Round 310.286 to the nearest tenth
- 4. Round 6.4 to the nearest whole number

- 5. Round 6.805 to the nearest hundredth
- 6. Round 9.765 to the nearest tenth
- 7. Round 118.387 to the nearest hundredth
- 8. Round 65.85 to the nearest whole number

# SOLVE ONE-STEP EQUATIONS

Solve each equation.

1) 
$$10 = z + 6$$

2) 
$$8y = 48$$

3) 
$$q - 12 = 1$$

4) 
$$18 = \frac{a}{2}$$

5) 
$$\frac{r}{3} = 7$$

### **PROPORTIONS**

Use cross multiplication to solve the following proportions.

$$\frac{1}{6} = \frac{15}{18}$$

$$\frac{2}{3} = \frac{16}{24}$$

$$\frac{3}{5} = \frac{3}{15}$$

$$\frac{4}{6} = \frac{2}{12}$$

$$\frac{5}{5} = \frac{16}{20}$$

6. 
$$\frac{1}{2} = \frac{1}{8}$$

### COORDINATE PLANE

Graph and label the following ordered pairs on the given coordinate plane.

Point A (5, 1)

Point B (-3, -8)

Point C (0, 6)

Point D (-7, 2)

Point E (9, 0)

Point F (4, -5)

Point G (-8, 0)

