Rising 7th Grade Math

Summer Break Work

Scholar's Name _____

Parent's Signature _____

**Welcome to 7th grade! It is going to be a GREAT year! ☺
This packet is due on the first day of school. You must show meticulous
work for <u>every</u> question and use all of your smart strategies so your
teacher can see what you have mastered and what you still need help
with. You should not use a calculator on any problem.**

1. **ADD/SUB FRACTIONS**
   Solve the following problems. All your answers should be fractions in lowest terms.
   a. $\frac{4}{7} + \frac{2}{7}$

   b. $\frac{3}{5} + \frac{4}{5}$

   c. $\frac{6}{7} - \frac{2}{7}$

   d. $\frac{8}{10} - \frac{4}{10}$

   e. $\frac{4}{5} + \frac{2}{3}$

   f. $\frac{4}{10} + \frac{4}{5}$

   g. $\frac{9}{14} - \frac{3}{7}$

   h. $\frac{7}{9} - \frac{1}{6}$

2. **ADD/SUB MIXED NUMBERS**
   Solve the following problems. All your answers should be simplified fractions
   a. $12 \frac{4}{7} - 9 \frac{5}{6} =$

   b. $9 \frac{2}{5} + 6 \frac{9}{15} =$

   c. $5\frac{3}{4} - 2\frac{4}{5}$

   d. 39 hundredths + 123 hundredths

   e. $7\frac{3}{8} - 5\frac{3}{4}$

   f. $6 - 2\frac{2}{6}$

3. **ADD/SUB DECIMALS**
   Solve the following problems. Show your work. Your answers should be decimals.

a. 0.56 + 2.9

b. 145.98 + 5678.9

c. 7.65 − 4.2

d. 100.04 − 98.9

e. 345.593 + 500.45

f. 204.7 − 77.891

4. MULT/DIV WHOLE NUMBERS. Solve the following problems. Show your work.

a. 65 x 9

b. 89 ● 17

c. 467 x 8

d. 654 x 25

e. 874 ÷ 5

f. 3567 ÷ 12

5. MULT/DIV FRACTIONS. Solve the following problems. All your answers should be simplified fractions.

a. $\frac{2}{3}$ x $\frac{5}{6}$

b. $\frac{15}{30}$ ÷ $\frac{8}{11}$

c. $7\frac{1}{4}$ x $5\frac{5}{6}$

d. $9 \bullet 1\frac{3}{5}$

e. $8 \div \frac{1}{7}$

f. $5\frac{6}{7}(3)$

g. $10\frac{2}{6} \bullet 6\frac{1}{6}$

h. $\frac{1}{5} \div 6$

6. **MULT/DIV DECIMALS. Solve the following problems. Show all work.**
   a. $1.15 \div 12 =$

   b. $2.32 \bullet 15$

   $c.\ 255.5 \div 0.5 =$

   d. $0.006(1.5)$

7. **SOLVE FRACTION WORD PROBS**
   For each of the following word problems, write a clear number sentence and solve. Circle your answer.

a. Josiah has 12 gallons of juice for his party. When he was getting ready, he spilled 2/3 of it. How much juice did he spill?

b. Jonny has 12 gallons of juice for his party. When he was getting ready, he spilled 3/4 of a gallon. How much juice does he have left?

c. Erica had 4 pizzas. Each pizza has eight slices. She gave her brother half of a pizza. How much pizza does she have left?

d. Four boys shared 1/3 of a pie equally. What fraction did each boy receive?

e. Terah has 6 pints of chocolate. He has to equally split the chocolate into 16 bowls. How many pints of chocolate will go into each bowl?

f. Kylie used 1/3 of a stick of butter in the peanut butter cookies. She used 4.9 sticks of butter in the chocolate chip cookies. How many sticks of butter did she use in all?

8.   **Write the number sentence to match the written expression:**

a.   Three less than the sum of four and a number

b.   Subtract 12 from the product of 8 and a number

c.   Five times the difference of a number and ten

d.   Add 6 to the quotient of 6 and a number

e.   Sally rents a life jacket for a one-time fee of $5. She then rents a canoe for $15 per hour. Write an expression that represents the total cost, in dollars, to rent the life jacket and the canoe for h hours?

9. **Solve the following expressions, if w equals 12:**
   a. 7(w - 5)

   b. 4w + 8

   c. 10(w + 6)

10. **Which of these expressions are equivalent to $\frac{p}{3}$? Select all that apply.**
   a. $p - \frac{2}{3}p$ b. $\frac{3p}{9}$

   c. $\frac{1}{3}p$ d. $\frac{1}{3}p + \frac{1}{3}p + \frac{1}{3}p$

   e. p-3   f. $3 \div p$

11. **Which of the following is equivalent to 10^5? Select all that apply.**
   a. 10 x 5

   b. 10 x 10 x 10 x 10 x 10

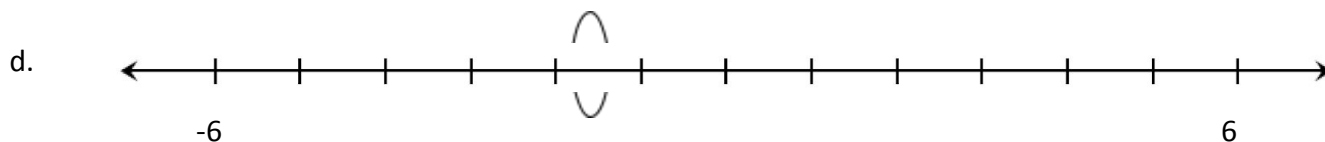   c. 5 x 10

   d. 10,000

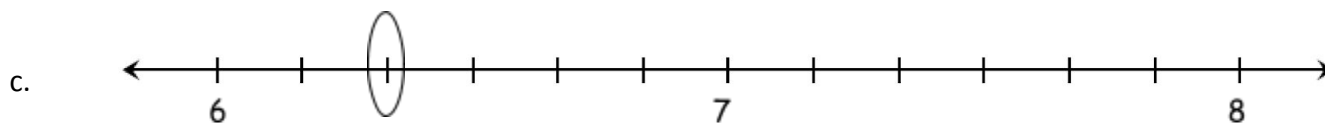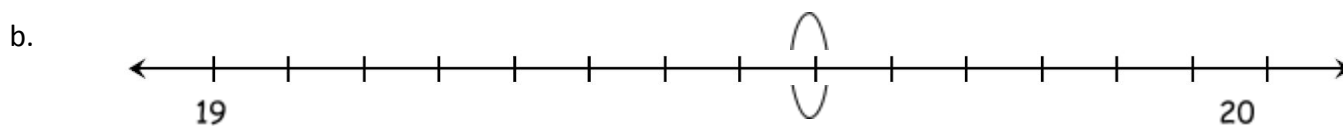   e. 100,000
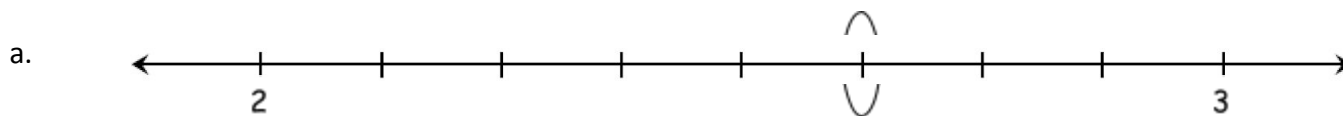
12.

716,504,113.992

a. Round this number to the nearest ten thousand: _____

b. Round this number to the nearest whole: _____

c. Round this number to the nearest hundredth: _____

d. Round this number to the nearest hundred: _____

13. For the number lines below, label the circled hash mark.

a.

2   3

b.

19   20

c.

6   7   8

d.

-6   6

14. ORDER OF OPERATIONS. Solve all problems in the correct order.

a. $(8-3)+10 \div 5$ b. $(14+18) \cdot 3+5$

c. $(10+22-2) \div 5$ d. $(12+28-4) \div(2+6)$

15. COMBINE LIKE TERMS. Write all expressions in simplest form.

    a.   a + a   b.   a + 2a   c.   a + 3a + b

    d.   25x + 2y - 19x − y   e.   d +2d + 3e + d   f. 2(x + 3y) - 2x

18. SOLVING EQUATIONS. Solve the following equations. Show your work and check it.

a) $y + 6 = 20$

b) $12 + z = 15$

c) $2 + n = 16$

d) $m - 5 = 10$

e) $2x = 16$

f) $k \bullet 2 = 6$

g) $3h = 27$

h) $6p = 30$

i) $\frac{x}{8} = 2$

j) $\frac{2}{3}x = 4$