

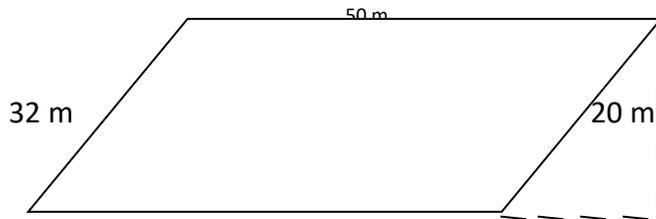
Name _____

Date _____

7th Grade Honors Pre-Algebra Summer Packet

- 1) Find the sum of $3\frac{1}{5} + 2\frac{3}{4}$.
- 2) Find the difference for $5\frac{1}{10} - 3\frac{2}{3}$.
- 3) Find the product of $\frac{5}{8} \cdot \frac{6}{11}$.
- 4) Find the quotient for $3\frac{3}{10} \div 1\frac{5}{6}$.
- 5) Find the difference for $2.5 - 0.27$.
- 6) Find the quotient of $7.32 \div 0.3$.
- 7) Find the solution for $-9 - (-3)$.
- 8) Find the solution for $-9(3)$.
- 9) Find the solution for $6^3 \cdot 4$.
- 10) Find the solution for $\frac{(8 \cdot 2) + 2}{6 - 3}$.
- 11) Evaluate $x^2 + y^3$ if $x = -6$ and $y = 2$.
- 12) Evaluate $2 - c^2$ if $c = -3$.
- 13) Write "the quotient of y and 5 " as an algebraic expression.
- 14) Solve $x + 5.07 = 2.3$.
- 15) $x - (-5) = 5$.

16) Find the area AND perimeter for the following figure:



Area = _____

Perimeter = _____

17) If it took you 7 hours to mow 4 lawns, then at this rate, how many lawns could be mowed in 35 hours?

At what rate would one lawn be mowed?

18) How wide is a rectangular strip of land with a length of $\frac{3}{4}$ mi and an area of $\frac{1}{2}$ mi²?

Find the perimeter of the rectangular strip of land.

19) A marching band has 8 musicians in the first row, 11 musicians in the second row, 14 musicians in the third row. Assuming the pattern continues, how many musicians will be in the eighth row?

20) Bill scored 12, 15, 13, 23, and 18 points respectively in the first 5 basketball games. What are his mean and median points scored in these games?

Mean = _____

Median = _____

21) The groundskeeper at a ballpark needed dirt to cover 380.75 ft^2 of one field, and 590.5 ft^2 of another field. He bought enough dirt cover 800 ft^2 . Did he buy enough dirt to cover both fields? Why or why not??

22) The students in Mr. Hill's class played games at recess.

- 6 boys played soccer
- 4 girls played soccer
- 2 boys jumped rope
- 8 girls jumped rope

Afterward, Mr. Hill asked the students to compare the boys and girls playing different games. Mika said, "Four more girls jumped rope than played soccer." Chaska said, "For every girl that played soccer, two girls jumped rope." Mr. Hill said, "Mika compared the girls by looking at the difference and Chaska compared the girls using a ratio."

a) Compare the number of boys who played soccer and jumped rope using the difference. Write your answer as a sentence as Mika did.

b) Compare the number of boys who played soccer and jumped rope using a ratio. Write your answer as a sentence as Chaska did.

c) Compare the number of girls who played soccer to the number of boys who played soccer using a ratio. Write your answer as a sentence as Chaska did.

23) Selina bought a shirt on sale that was 20% less than the original price. The original price was \$5 more than the sale price. What was the original price? Explain or show work.

- 24) Every student was given a magnet in Science class today. Each magnet weighed 16.5 of a pound. If there were 28 students in your class, how much did all of the magnets weigh together?
- 25) Thomas buys a case of bottled water. A case contains 36 bottles of water and \$4.69. Thomas will sell each bottle of water for \$0.75 at a school event. How much profit, in dollars, will Thomas earn if he sells all the bottles of water?
- 26) Denver, Colorado is called “The Mile High City” because its elevation is 5280 feet above sea level. Someone tells you that the elevation of Death Valley, California is -282 feet.
- Is Death Valley located above or below sea level? Explain.
 - How many feet higher is Denver than Death Valley?
- 27) Jake tells a joke to 3 people and each of those people tells the joke to 3 more people, and so on. How many people will hear the joke in the 4th round of jokes told? How many people will hear the joke in total after the fourth round?
- 28) Jamie rented a canoe while she was on a camping trip with her family. She paid a flat rental fee of \$85 plus \$9 per day of her trip. In total, she paid \$130 for the canoe. Write AND solve a two-step equation using d for days to see how long she rented the canoe for.
- 29) In 1988, 77 year old John Glenn became the oldest person to travel into space. Other astronauts traveling on that same mission were 43, 37, 38, 46, 35, and 42 years old. Find the mean, median, and mode with and without Glenn’s age. Explain how his age affected the measures of central tendency.

30) Michael opened his account with \$365 and withdrew \$20 per week. Riley opened her account with \$270 and withdrew \$15 weekly. In how many weeks will their accounts be equal?