Name: $\qquad$ Date:

## Grade 8 Summer Work SC

## Directions:

Solve all problems and show your work (no work = no credit). Make sure to include units where appropriate.

1. Lisa is cooking muffins. The recipe calls for 7 cups of sugar. She has already put in 2 cups. How many more cups does she need?

Write an equation you could use to solve the problem.

Solve the equation:

Lisa would need $\qquad$ more cups.
2. At a restaurant, Mike and his three friends decide to divide the bill evenly. If each person paid $\$ 13$ then what was the total bill?
3. Steve drives 78 miles on 3 gallons of gas. Find the miles per gallon.
4. Maria walks 12 miles in 3 hours. How many miles does she walk per mile?
5. Last Friday Adam had $\$ 22.23$. Over the weekend he received some money for cleaning the attic. He now has $\$ 32$. How much money did he receive?
6. After paying $\$ 5.12$ for a salad, Fred has $\$ 27.10$. How much money did he have before buying the salad?
7. One bag of pretzels costs three dollars. Five bags of pretzel costs $\$ 10$. Which has the lower unit price?
8. It costs $\$ 3.99$ for 25 fl oz of detergent or $\$ 6.99$ for 90 fl oz . Which is the better buy?

For \#10 - \#16 Solve for x :
10. $\frac{x}{5}=2$
11. $-12 r+4=100$
12. $-13 m=-377$
13. $9+\frac{n}{4}=15$
14. $-1=\mathrm{b}-7$
15. $-5=1-r$
16. $-5 x+13=-17$
\#17-\#21 Simplify:
17. $3(6+7)$
18. $\frac{(5+16)}{7-2}$
20. $(2+6 \times 2+2-4) \times 2$
19. $\frac{9-32}{4}$
21. $\frac{48}{4}-(5-3)$
\# 22-\#24. Find the product:
22. $2.34 \times 10^{4}$
23. $0.009 \times 10^{2}$
24. $7.3 \times 10^{-3}$
25. At a wedding reception, an equal number of guests were seated at 12 round tables. The 13 people in the wedding party were seated at a rectangular table. There were 121 people at the reception altogether. Which equation could you use to found the number of guests, n , seated at each round table?
a. $12+13 n=121$
b. $12 \mathrm{n}+13=121$
c. $121=13 n-12$
d. $121=12 \mathrm{n}-13$
26. Jeremiah makes a recipe that calls for 1 cups of flour and $\frac{1}{2}$ stick of butter. If Jeremiah uses 3 sticks of butter, how many cups of flour will he need?
27. Where would 0.93 be located on the number line shown below?

a. Between 0 and 0.35
b. Between 0.35 and 0.5
c. Between 0.5 and 0.81
d. Between 0.81 and 1.0
28. Which decimal is terminating?
a. $0 . \overline{12}$
b. $0.4444 \ldots$....
c. $0.5 \overline{6}$
d. 0.7878
29. A goalie makes 9 saves in 3 games. What is the unit rate of saves per game? The unit rate is $\qquad$ saves per game.
30. What is the unit rate for miles per gallon if you travel 266 miles on 19 gallons of fuel? The unit rate is $\qquad$ miles per gallon.
31. A 25 -pound bag of cat food costs $\$ 20.50$. A 35 -pound bag of the same cat food costs $\$ 29.05$. Which bag of cat food is the better buy?
32. Carla is going on a boat tour. The boat will travel a total distance of 40 kilometer during the 10 -hour tour. If the boat travels at a constant speed during the tour, what distance in kilometer should the boat travel in 7 hours?
a. 13
b. 10
c. 28
d. 29
33. The temperature in a town is $30.8^{\circ} \mathrm{F}$ during the day and $-23.8^{\circ} \mathrm{F}$ at night. Find the difference in the temperatures. The different in temperature is $\qquad$ ${ }^{\circ}$.
34. Hannah says the $2 . \overline{11}$ is a rational number. Gus says that $2 . \overline{11}$ is a repeating decimal. Who is correct and why?
35. Four friends race their bikes down the street. Evan finishes in 6.2 seconds, Devon in 6.0999 seconds, Liza in 6.188 seconds, and Tasha in 6.168 seconds. Which order shows the friends' times from fastest to slowest?
36. Which number is missing on the number line below?

\# 37.-\#40.
Provide the ordered pair that describes the location of the following letters.
$R(, \quad)$

S ( , )

Q ( , )

P( , )

\#41.- \#45.
Plot the following points on the coordinate graph.

| Point | Coordinates |
| :---: | :---: |
| A | $(3,-3)$ |
| B | $(-5,1)$ |
| C | $(-2,-2)$ |
| D | $(-3,-5)$ |
| E | $(-4,-8)$ |



