

Name: _____

Due: Thursday, September 8

Geometry Review Worksheet: How much do you remember from Algebra?
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1. What is the order of operations?
2. Simplify: $43 - [4(6 - 3)] =$
3. Simplify: $(8^2 + 8 \times 4 + 9 - 7) \div 4$
4. Evaluate when $x = 2$. $3x^2 + x + 5$
5. Evaluate $\frac{bc}{b+c}$ when $b=7$ and $c=3$
6. A sweater costs \$35. Find the total cost of the sweater if sales tax is 10%.
7. You bought a pair of shoes that were 20% for \$80. What was the original price?
8. The low temperature in Alaska was -5° . During the day, the temperature rose 20° . What was the high temperature on Monday?
9. Evaluate. $|-8 - (-7)|$
10. Solve. $x^2 = -9$

11. Evaluate. $15 - (-2x)$ when $x=8$

12. Simplify. $-(4)^2$

13. Simplify. $(-4)^2$

14. Compare the fractions. Insert an inequality symbol to make it a true statement.

$$\frac{8}{24} [?] \frac{3+1}{6}$$

15. The Brewer bullpen has struggled this season. The probability of the bullpen recording a save is 48%. What is the probability of a reliever blowing a save? (Not recording a save)

16. Simplify. $3x+6-2x+4$

17. Simplify. $3(5+2x)$

18. Simplify. $-2(6x-18)+7$

19. Simplify. $4x(x+1)$

20. For #16-19, why are these considered expressions and not equations? Why does it say "simplify" instead of solve?

21. In algebra, what is meant by the term “variable”?

22. Solve for the variable. $x-2 = 3$

23. Solve for the variable. $\frac{5x}{7} = 35$

24. Solve for the variable. $4x+8 = -32$

25. Solve. $9n+20-7n = 42$

26. Solve. $12 = 4(x-2)$

27. Solve. $x+7 = -3x-2$

28. Solve. $3+5(x+7) +2x = 3x - 8^2+x$

29. Solve. $5x-35-2 = 14x+8$

30. Solve for x. Give all possible solutions.

$$4x^2+3 = 19$$

31. In an election between two candidates, 510 votes were cast. If the winner received 380 votes more than the loser, how many votes did the loser receive?
32. Play tickets for two adults and two children cost \$24. A child's ticket costs half as much as an adult's ticket. Find the cost of a child's ticket.
33. Admission into the Manitowoc County Fair is \$10/person (this includes all rides and entrance into the Grandstand). Admission into the Sheboygan County Fair is: Adult \$5, Children 10-14 \$2, and Under 10 is free. Rides are an additional \$20 for a wristband.

My family went to the Sheboygan County fair, however, I want to know how much more expensive is it to take my family to the Sheboygan County Fair then the Manitowoc Fair?

Important info:

We only bought two wristbands.

My family consists of myself, my husband, and three kids who are ages 9, 8, and $5\frac{1}{2}$.

My 5 year old and 8 year old sons also went to the demo derby show with their dad. Prices for this show were \$9 for adults and under 6 Free.