

Name _____
Algebra 2 – Chapter 1 Test Review

1. Name the property illustrated by the equation $9 \times 1 = 9$
2. Name the sets of numbers to which $\frac{9}{5}$ belongs
3. Name the sets of numbers to which 15 belongs.
4. Select the algebraic expression that represents the verbal expression: the difference of nine and a number.
5. Which equation could be used to solve the following problem? The product of 3 times a number and 7 is 31. Find the numbers.

Solve each inequality.

6. $-2w + 8 \geq 16$

7. $2x - 3 \leq 5$ or $2 - x < 1$

8. $-2 \leq 4y + 2 \leq 10$

9. $|m + 3| > 8$

10. Graph the solution set of $4 > b + 1$.

Evaluate the expression if $a=2$, $b=-\frac{3}{4}$ and $c=1.8$

11. $1.5c - 7b$

12. $-9(a-6)$

13. Simplify $7a + 3b - 4a - 5b$

Solve each equation below.

14. $\frac{3}{2}x = 8$

15. $3(4x - 8) = 2x + 7$

16. $|x - 1| = 15$

17. $-5|x + 2| = 20$

18. Jack is five years younger than his brother. The difference of their ages is 14. Find Jack's age.

19. To receive a A in his Math class, Steve must have an average score of at least 90 on five tests. He scored 99, 89, 92, and 84 on his first four tests. What must he score on the last test to receive a A in the class?

20. David earns \$5.60 an hour working at Target. Each week, 25% of his total pay is deducted for taxes. If David wants his take-home pay to be at least \$105 a week, solve the inequality $5.6x - 0.25(5.6x) \geq 105$ to determine how many hours he must work.