8th Period
Algebra 1 BB.1 Always / Sometimes / Never Name:_____

For each statement below - determine if it is always, sometimes, or never true.
Hint - make up examples for each problem to help you determine the answer.

1. Max gets a pay raise of 30%. Jim gets a pay raise of 25%. So Max gets the bigger pay raise.

2. When you cut a piece off a shape, you reduce its area and perimeter

3. If you add the same number to the top and bottom of a fraction, the fraction gets bigger in value.

4. In a sale, every price was reduced by 25%. After the sale, every price was increased by 25%. So the prices went back to where they started.

5. $(a+b)/2 \geq (ab)^{1/2}$

6. If you divide the top and bottom of a fraction by the same number, the fraction gets smaller in value.

7. It doesn't matter which way you multiply, you get the same answer, like $a \times b = b \times a$.

8. If you add a number to 12, you get a number greater than 12.

9. The square root of a number is less than the number.

10. It doesn't matter which way you divide, you get the same answer, like $a \div b = b \div a$.

11. If you divide 12 by a number, the answer will be less than 12.

12. The square of a number is greater than the number.

13. $p + 12 = s + 12$

14. $(n + 5)$ is less than 20

15. $2(x + 3) = 2x + 3$