# Name 

Algebra 2 - Chapter 1 Test Recovery

1. Name the property illustrated by the equation $(3+4)+2=3+(4+2)$.
2. Name the sets of numbers to which -1 belongs.
3. Name the sets of numbers to which 2.5 belongs.
4. Select the algebraic expression that represents the verbal expression the sum of 15 times a number and 7 .
5. Which equation could be used to solve the following problem? The sum of 3 times a number and 7 is 31. Find the numbers.

Solve each inequality.
6. $-4 w+16 \geq 32$
8. $-4 \leq 8 y+4 \leq 20$
7. $x-3 \leq 5$ or $2-2 x<1$
9. $|m+6|>1$
10. Graph the solution set of $7>b+2$.

Evaluate the expression if $a=3, b=-\frac{3}{5}$ and $c=1.5$
11. $1.5 \mathrm{c}-7 \mathrm{~b}$

12 -9(a-6)
13. Simplify $7 x+3 y-4 x-5 y$

Solve each equation below.
14. $\frac{1}{4} x=4$
15. $4(2 x-4)=x+5$
16. $|x-6|=20$
17. $-12|x+2|=24$
18. 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 $5.6 \mathrm{x}-0.25(5.6 \mathrm{x}) \geq 105$ to determine how many hours he must work.

