Name _____

Simplify Expressions

Combine like terms to simplify each expression.

1) $1\frac{1}{2}z^2 + 3\frac{1}{2} + 5z - 3 + 6z - \frac{1}{2}z^2 =$ $\square z^2 + \square z + \square$

2) $4y + 9y$

3) $3z + \frac{3}{4} - 2z$

4) $25 + 5w - 10 + w$

5) $7.7w - 4.6w$

6) $\frac{1}{2}x + \frac{1}{2} + \frac{1}{2}x + \frac{1}{2}$

7) $12y^2 - 6y^2$

8) $3z^3 + 2\frac{1}{4} - z^3$

9) $6.6m + 3m$

10) $100n - 1 - 25n$

11) $5x + \frac{1}{2} + 3y + \frac{1}{4} + 2x - 2y$

12) $p^3 + 2.3 + 3p^3$

13) $z^4 + z^4 + z^4 + z^4$

14) Casey's family ordered a small drink and *m* medium drinks. Anika's family ordered *m* medium drinks and a large drink. Write an algebraic expression that shows the total cost of both orders, then simplify.

Small	$1.10
Medium	$1.25
Large	$1.50

15) Write each expression below in the correct column in the table at the right to show whether the expression is equivalent to $\frac{1}{2}x + 4\frac{1}{2} + \frac{1}{2}x - \frac{1}{2}$

$x + 4$	$4 + x$
$x + 4\frac{1}{2}$	$x - 4$

Equivalent	NOT Equivalent