Name Key Date 9.13 Period 1 2 3 4 5 6

**Topic 1 // Holt 1.2 + 1.4 // Practice A** **2008-09**

1. What is the reciprocal of 8?

$\frac{1}{8}$

2. What is the reciprocal of $-\frac{3}{2}$?

$-\frac{2}{3}$

3. What is the quotient of -9 and 3?

$-9 \div 3 = \boxed{-3}$

4. What is the difference of 10 and -3?

$10 - -3 = \boxed{13}$

5. What is the reciprocal of the quotient of -8 and 24?

$\frac{-8}{24} = -\frac{1}{3}$

$\boxed{-3}$

6. What is the product of the opposite of 5, and the reciprocal of 5?

$-5 \cdot \frac{1}{5} = \boxed{-1}$

Simplify the following expressions:

7. $-3 + (5 - 8)^2 - 1$

$-3 + (-3)^2 - 1$

$-3 + 9 - 1$

$\boxed{5}$

8. $5 - 8 \div 2 + 7 \cdot 3$

$5 - 4 + 21$

$\boxed{22}$

9. $(2 - 4)(2 + 3)^2$

$(-2)(5)^2$

$(-2)(25)$

$\boxed{-50}$

10. $4 - 3(2 - 5)^2$

$4 - 3(-3)^2$

$4 - 3(9)$

$4 - 27$

$\boxed{-23}$

11. $-3^2 - (2 - 5) + 4(1 + 2^2)^2$

$-9 - (-3) + 4(1+4)^2$

$-9 + 3 + 4(5)^2$

$-9 + 3 + 4(25)$

$-9 + 3 + 100$

$-6 + 100$

$\boxed{94}$

12. Evaluate $2a^2 + 3b^3$ when a = 3 and b = 1

$2(3)^2 + 3(1)^3$

$2(9) + 3(1)$

$18 + 3$

$\boxed{21}$

13. Evaluate $-4x^3 - 2x^2 + 5x - 1$ when x = -2

$-4(-2)^3 - 2(-2)^2 + 5(-2) - 1$

$-4(-8) - 2(4) + (-10) - 1$

$32 - 8 - 10 - 1$

$24 - 10 - 1$

$14 - 1$

$\boxed{13}$

14. Evaluate $3y^3 - y^2$ when y = -1

$3(-1)^3 - (-1)^2$

$3(-1) - (1)$

$-3 - 1$

$\boxed{-4}$