

N: Key

D: _____

P: 1 2 3 4 5 6

Topic 1 // 1.2 + 1.4 Practice // Practice A

Mission Hills Math 2013

1. What is the reciprocal of 8?

"flip"

$$\boxed{\frac{1}{8}}$$

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

$$\boxed{-\frac{2}{3}}$$

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

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

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?

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

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

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

$$-3 + 9 - 1$$

$$6 - 1$$

$$\boxed{5}$$

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

$$5 - 4 + 21$$

$$1 + 21$$

$$\boxed{22}$$

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

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

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

$$-9 + 3 + 4(25)$$

$$-9 + 3 + 100$$

$$-6 + 100$$

$$\boxed{94}$$

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 $y = -1$

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

$$3(-1) - (1)$$

$$-3 - 1$$

$$\boxed{-4}$$