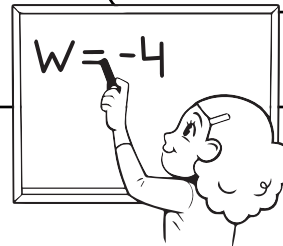


Name: _____

Advanced

Evaluate Expressions



Evaluate the following expressions for $w = -4$.

1. $\frac{6(w-4)}{8}$

2. $\frac{w}{2} + 3w$

3. $w(2-6)$

4. $w^2 - 4$

5. $\frac{10w}{-8} + 2w$

6. $\frac{w-6}{2}$

7. $\frac{64}{w^2}(w+6)$

8. $\frac{w(16-8)}{-2}$

Evaluate the following expressions for $e = 7$ and $u = -8$.

9. $\frac{e(u-3)}{11}$

10. $-3(u-e)$

11. $\frac{u^2 - e^2}{60}$

12. $2e(u+12)$

13. $\frac{10e}{2} + 4u$

14. $2(u^2 + e)$

15. $\frac{u^2 + 2}{2e + u}$

16. $\frac{eu}{4} - e$

Evaluate the following expressions for $s = -5$ and $t = 6$.

17. $\frac{-8s}{4} + (s-t)$

18. $3s(4t - s^2)$

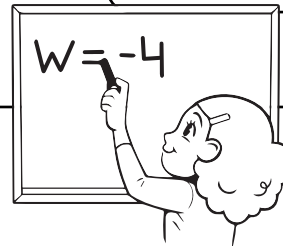
19. $\frac{2t}{4}(s-3)$

20. $\frac{2(2s-t)}{8}$

ANSWER KEY

Advanced

Evaluate Expressions



Evaluate the following expressions for $w = -4$.

$$1. \frac{6(w-4)}{8}$$

$$\frac{6(-4-4)}{8}$$

$$\frac{6(-8)}{8}$$

$$\frac{-48}{8} = -6$$

-6

$$2. \frac{w}{2} + 3w$$

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

$$-2 + -12 = -14$$

-14

$$3. w(2-6)$$

$$-4(2-6)$$

$$-4(-4) = 16$$

16

$$4. w^2 - 4$$

$$-4^2 - 4$$

$$16 - 4 = 12$$

12

$$5. \frac{10w}{-8} + 2w$$

$$\frac{10(-4)}{-8} + 2(-4)$$

$$\frac{-40}{-8} + -8$$

$$5 + -8 = -3$$

-3

$$6. \frac{w-6}{2}$$

$$\frac{-4-6}{2}$$

$$\frac{-10}{2} = -5$$

-5

$$7. \frac{64}{w^2} (w+6)$$

$$\frac{64}{-4^2} (-4+6)$$

$$\frac{64}{16} (2)$$

$$4(2) = 8$$

8

$$8. \frac{w(16-8)}{-2}$$

$$\frac{-4(16-8)}{-2}$$

$$\frac{-4(8)}{-2}$$

$$\frac{-32}{-2} = 16$$

16

Evaluate the following expressions for $e = 7$ and $u = -8$.

$$9. \frac{e(u-3)}{7}$$

$$\frac{7(-8-3)}{7}$$

$$\frac{7(-11)}{7}$$

$$\frac{-77}{7} = -11$$

-11

$$10. -3(u-e)$$

$$-3(-8-7)$$

$$-3(-15) = 45$$

45

$$11. \frac{u^2 - e^2}{60}$$

$$\frac{-8^2 - 7^2}{60}$$

$$\frac{64 - 49}{60}$$

$$\frac{15}{60} = \frac{1}{4}$$

$\frac{1}{4}$ or .25

$$12. 2e(u+12)$$

$$2(7)(-8+12)$$

$$14(4) = 56$$

56

$$13. \frac{10e}{2} + 4u$$

$$\frac{10(7)}{2} + 4(-8)$$

$$\frac{70}{2} + -32$$

$$35 + -32 = 3$$

3

$$14. 2(u^2 + e)$$

$$2(-8^2 + 7)$$

$$2(64 + 7)$$

$$2(71) = 142$$

142

$$15. \frac{u^2 + 2}{2e + u}$$

$$\frac{-8^2 + 2}{2(7) + -8}$$

$$\frac{64 + 2}{14 + -8}$$

$$\frac{66}{6} = 11$$

11

$$16. \frac{eu}{4} - e$$

$$\frac{7(-8)}{4} - 7$$

$$\frac{-56}{4} - 7$$

$$-14 - 7 = -21$$

-21

Evaluate the following expressions for $s = -5$ and $t = 6$.

$$17. \frac{-8s}{4} + (s-t)$$

$$\frac{-8(-5)}{4} + (-5-6)$$

$$\frac{40}{4} + -11$$

$$10 + -11 = -1$$

-1

$$18. 3s(4t - s^2)$$

$$3(-5)(4(6) - (-5)^2)$$

$$-15(24 - 25)$$

$$-15(-1) = 15$$

15

$$19. \frac{2t}{4} (s-3)$$

$$\frac{2(6)}{4} (-5-3)$$

$$\frac{12}{4} (-8)$$

$$3(-8) = -24$$

-24

$$20. \frac{2(2s-t)}{8}$$

$$\frac{2(2(-5)-6)}{8}$$

$$\frac{2(-10-6)}{8}$$

$$\frac{2(-16)}{8}$$

$$\frac{-32}{8} = -4$$

-4