Pre-Algebra B Name/Date Solutions

ALL PROBLEMS CAN BE COMPLETED ON THIS WORKSHEET

WS 11.1 – Multiplying & Dividing Algebraic Expressions

Simplify each expression.

1. $-4 \cdot 3x$

$-12x$

2. $-4x \cdot 3x$

$-12x^2$

3. $2x(5x+1)$

$10x^2 + 2x$

4. $-15x \div 3$

$\frac{-15x}{3} = -5x$

5. $-15x \div 3x$

$\frac{-15x}{3x} = -5$

6. $\frac{-24x}{-6x}$

4

7. $-2(6x+3)$

$-12x - 6$

8. $16x \div (-2)$

$\frac{16x}{-2} = -8x$

9. $16x \div (-2x)$

$\frac{16x}{-2x} = -8$

10. $\frac{11-33y}{11}$

$\frac{11}{11} - \frac{33y}{11} = 1 - 3y$

11. $\frac{-10z+35}{5}$

$\frac{-10z}{5} + \frac{35}{5} = -2z + 7$

12. $\frac{5w+15}{-5}$

$\frac{5w}{-5} + \frac{15}{-5} = -w - 3$

13. $\frac{4y+4}{4}$

$\frac{4y}{4} + \frac{4}{4} = y + 1$

14. $\frac{-27g^2+18}{-9}$

$\frac{-27g^2}{-9} + \frac{18}{-9} = 3g^2 - 2$

15. $\frac{30g^2+20g-8}{2}$

$\frac{30g^2}{2} + \frac{20g}{2} - \frac{8}{2}$

$= 15g^2 + 10g - 4$

16. $2x^2 - 1(4 - x^2)$

$2x^2 - 4 + x^2$

$3x^2 - 4$

17. $8x^2 - 10(2 - 5x^2)$

$8x^2 - 20 + 50x^2$

$58x^2 - 20$

18. $3x \cdot 5 + 2x \cdot 2$ (Remember PEMDAS)

$15x + 4x$

$19x$

REMEMBER THAT COMBINING LIKE TERMS IS ADDING. WE ALWAYS MULTIPLY BEFORE WE ADD. ADDITION IS LAST.