

## HW 3-6

## Int 1

## Add Algebraic Expressions

## Unit 3

Simplify each algebraic expression by distributing and combining like terms.

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

$$20x + 18$$

6.  $5(-3x+9)+3(14x-2)$

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

7.  $-11(2x-7)-6(3x+5)$

$$-40x + 47$$

3.  $-4(-7x+4)+5(-5x-12)$

$$3x - 76$$

8.  $-7(-7x-5)+9(3x+6)$

4.  $10(4x+10)+2(-5x-2)$

9.  $11(4x+2)-8(3x-1)$

$$20x + 30$$

5.  $2(7x-9)-8(-x-6)$

10.  $4(3x+5)-5(-2x-2)$

$$22x + 30$$

Simplify each algebraic expression by distributing and combining like terms

11.  $3(2x+4)+(4x-2)$

$$10x + 10$$

14.  $5(r+6)-2(r-5)$

12.  $-12(x-1)-2(-6x+3)$

15.  $8(8u+3v+6)+2(-4u-2v-1)$

$$56u + 20v + 46$$

13.  $-4(6d+2)+2(8+4d)$

$$-16d + 8$$

**Core Review:**

Simplify each expression.

16.  $4x-2+3x+4x-2+x$

17.  $50-10(4x+3)+14x$

$$20 + 26x$$

Evaluate the following if  $x = \frac{2}{5}$  and  $y = \frac{5}{6}$ .

18.  $xy$

21.  $3x+2y$   $\frac{43}{15}$

19.  $x-y$   $\frac{-13}{30}$

22.  $x \div y$

20.  $x^2$