 Name_____

Distributive Property, Algebraic

Date_____ Period____

Determine if the two expressions are equivalent.

1) $27x + 12y$ and $3(9x + 4y)$

2) $24m + 31n$ and $8(3m + 4n)$

3) $56m - 56n$ and $56(m - n)$

4) $16(m - 2n)$ and $16m - 32n$

5) $4(9m + 3n + 7p)$ and $36m + 12n + 28p$

6) $15m + 45n + 13$ and $5(3m + 9n + 2)$

Distribute to create an equivalent expression.

7) $6(7x + 6)$

8) $9(2a + 3)$

9) $7(2m + 5n + 5)$

10) $27(m + n + 3p)$

11) $6(9x + 7y + 9z + 8)$

12) $2(5a + 2b + 2c + 5)$

Apply the distributive property to factor out the GCF and create an equivalent expression.

13) $45a + 15b$

14) $25a + 40b$

15) $18x + 36$

16) $36a + 18$

17) $6x - 10$

18) $63x - 56$

 Name_____

Distributive Property, Algebraic

Date_____ Period____

Determine if the two expressions are equivalent.

1) $27x + 12y$ and $3(9x + 4y)$

Equivalent

2) $24m + 31n$ and $8(3m + 4n)$

Not equivalent

3) $56m - 56n$ and $56(m - n)$

Equivalent

4) $16(m - 2n)$ and $16m - 32n$

Equivalent

5) $4(9m + 3n + 7p)$ and $36m + 12n + 28p$

Equivalent

6) $15m + 45n + 13$ and $5(3m + 9n + 2)$

Not equivalent

Distribute to create an equivalent expression.

7) $6(7x + 6)$

$42x + 36$

8) $9(2a + 3)$

$18a + 27$

9) $7(2m + 5n + 5)$

$14m + 35n + 35$

10) $27(m + n + 3p)$

$27m + 27n + 81p$

11) $6(9x + 7y + 9z + 8)$

$54x + 42y + 54z + 48$

12) $2(5a + 2b + 2c + 5)$

$10a + 4b + 4c + 10$

Apply the distributive property to factor out the GCF and create an equivalent expression.

13) $45a + 15b$

$15(3a + b)$

14) $25a + 40b$

$5(5a + 8b)$

15) $18x + 36$

$18(x + 2)$

16) $36a + 18$

$18(2a + 1)$

17) $6x - 10$

$2(3x - 5)$

18) $63x - 56$

$7(9x - 8)$