Basic Algebra 1.4
Use the distributive property to evaluate expressions

distributive property
term
like terms (same var. (same expon.))
coefficient
equivalent expression
simplify (simplest form)
=

$2(x+3) = x+3+x+3$

$= 2x+6$

$2 \cdot x + 2 \cdot 3$

$3n + 5n = 8n$

$3n + 5n^2$

3. **Determine** which two expressions are equivalent. Explain how you determined your answer.

a. $20n + 3p$

b. $16n + p - 4n + 2p$ $= 12n + 3p$

c. $16n + 4p + 4n$ $20n + 4p$

d. $12p + 3n$

e. $12n + 3p$

f. $20n - p - 16n + 2p$ $= 4n + p$

Whiteboards

Simplify each expression. *(Examples 1–4)*

8. $5x + 9x$
9. $4y + 2 - 3y$
10. $2(5g + 3g)$
11. $3(4 - 6m)$

Simplify each expression.

15. $16f + 5f$

16. $9a + 6a$

17. $4r - r$

18. $3 + 7 - 2st$

27. $2y + y + y$

28. $bp + 25bp + p$

29. $2(15xy + 8xy)$

$2 \cdot 23xy \qquad 30xy + 16xy$

$46xy$

30. $5(n + 2r) + 3n$

$6y - (2y + 1)$

$6 \cdot 3 - (2 \cdot 3 + 1)$

$6 \cdot 3 - 7$

$18 - 7 = 11$

35. What is the value of $6y$ decreased by the quantity $2y$ plus 1 if y is equivalent to 3?

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