

Key

6.7b Equivalent Expressions (6.EE.2, 6.EE.2b, and 6EE.4)

Properties and Vocabulary

Term - each part of an expression separated by an addition or subtraction sign. $2x + 3 + 5x$ (3 terms)

Coefficient - the number multiplied to a variable (letter) $5p$

Constant - a term without a variable. (letter by itself) 8

Like Terms - terms that contain the same variable. $5x$ $3x$

Guided Practice:
Simplify each expression.

1.) $5(6x)$

$\hookrightarrow 30x$

2.) $(2x) + 5y + (7x)$

$9x + 5y$

* can't add x and y together / so can only get rid of 4

3.) $4(2x + 5y)$

$\hookrightarrow \hookrightarrow$

$8x + 20y$

Factor - pull out a factor!

4.) Factor $35x + 28y \div 7$

$7(5x + 4y)$

5.) Mikayla bought five skirts at \$x each. Three of the five skirts came with a matching top for an additional \$9 each. Write and simplify an expression that represents the total cost of her purchase.

$5x + 3 \cdot 9 = 5x + 27$

6.) The gift bag from Claire Cosmetics includes 5 bottles of ^pnail polish and 2 tubes of ^glip gloss. Use p to represent the cost of each bottle of nail polish and g to represent the cost of each tube of lip gloss. Write and simplify an expression that represents the total cost of 8 gifts bags.

$8(5p + 2g) = 40p + 16g$

Building on the essential question - How can properties help to write equivalent algebraic expressions?

Apply properties and combine like terms

Rate Yourself - Are you ready to move on? Shade the section that applies.

