3.4 Extension Factoring Expressions

1

ESSENTIAL QUESTION

What does it mean to factor an expression and how do you do it?

2

In the last section we learned about using the Distributive Property to simplify an expression

If we simplify $4(10d - 9) \rightarrow 4 \cdot 10d - 4 \cdot 9 \rightarrow 40d - 36$

Problem Answer

When FACTORING AN EXPRESSION you are doing the opposite of simplifying the expression above. You are going to start with the ANSWER and come up with the PROBLEM.

3

Factor the expression using the GCF.

$20 - 12$

$4(5 - 3)$

4

Factor the expression using the GCF.

$24 - 18$

$3(8 - 6)$

5

Factor the expression using the GCF.

$32 + 16$

$4(8 + 4)$

6

Factor the expression using the GCF.
$5x + 15$

$5(x+3)$

7

Factor the expression using the GCF.
$4 - 12x$

$4(1-3x)$

8

Factor the expression using the GCF.
$28w + 20$

$4(7w+5)$

9

Factor the expression using the GCF.
$4y + 10$

$2(2y+5)$

10

Factor the expression using the GCF.
$16x - 24$

$8(2x-3)$

11

Factor the expression using the GCF.
$6x - 42$

$6(1x-7)$

12

TO FACTOR AN EXPRESSION MEANS YOU ARE DOING THE REVERSE OF THE DISTRIBUTIVE PROPERTY. YOU ARE STARTING WITH THE PROBLEM AND COMING UP WITH THE ANSWER.

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