Back to Basics HW_2

Thursday, April 23, 2015
12:13 PM

Can you find the error(s)?

= videos

~~Back to Basics HW_2~~	~~Period (circle one)~~: 5 7	Date:	Name: Key

Multiply

1. $(x-3)(x+4)$
   $x^2 - x - 12$
2. $(x-6)(x-3)$
   $x^2 - 9x + 18$
3. $(x+3)(x+12)$
   $x^2 + 15x + 36$

Factor

4. $x^2 - 11x + 18$
   $(x-9)(x-2)$
5. $x^2 - 3x - 18$
   $(x-6)(x+3)$
6. $x^2 + 10x + 16$
   $(x+8)(x+2)$

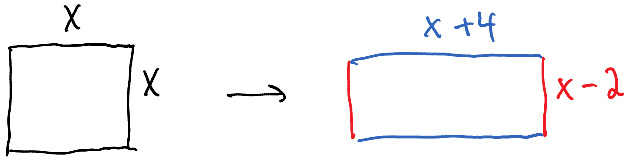
Multiply

7. $(3x+4)(x+6)$
   $3x^2 + 22x + 24$
8. $(3x-4)(4x-5)$
   $12x^2 - 31x + 20$
9. $(3x-1)(2x+7)$
   $6x^2 + 9x - 7$
10. $(2x+6)(3x+1)$
    $6x^2 + 20x + 6$
11. $(3x-2)(4x+7)$
    $12x^2 + 13x - 14$
12. $(4x-2)(2x-9)$
    $8x^2 - 40x + 18$

Factor

13. $2x^2 - x - 3$
    $(2x-3)(x+1)$
14. $9x^2 + 27x + 8$
    $(3x+1)(3x+8)$
15. $2x^2 - 29x + 60$
    $(2x-5)(x-12)$
16. $2x^2 + 13x + 15$
    $(2x+3)(x+5)$
17. $10x^2 + 33x + 20$
    $(5x+4)(2x+5)$
18. $2x^2 + 9x - 35$
    $(2x-5)(x+7)$

19. Area problem: A square with side lengths of x was converted into a rectangle by increasing two of the sides by 4 and decreasing the other two sides by 2. If the area of the new rectangle is 27 square units, what were the dimensions of the original square?



$A = l \cdot w$
$27 = (x+4)(x-2)$
$27 = x^2 + 2x - 8$
$-27 \quad -27$
$0 = x^2 + 2x - 35$
$0 = (x+7)(x-5)$

$x = -7$ or $x = 5$

The dimensions of the original square were 5 units by 5 units

$0 = (x+7)(x-5)$