

Warm-up 3/28/17

Determine the product for each.

1.  $(x + 5)(x + 7)$

$$x^2 + 7x + 5x + 35$$

$$x^2 + 12x + 35$$

2.  $(x - 5)(x - 7)$

$$x^2 - 7x - 5x + 35$$

$$x^2 - 12x + 35$$

3.  $(x - 5)(x + 7)$

$$x^2 + 7x - 5x - 35$$

$$x^2 + 2x - 35$$

4.  $(x + 5)(x - 7)$

$$x^2 - 7x + 5x - 35$$

$$x^2 - 2x - 35$$

Pg. 972

1a-c

$$4x + 12$$

$$4(x) + 4(3)$$

$$4(x + 3)$$

multiplying  
(distributive  
property)

$$3(x + 5)$$

$$3(x) + 3(5)$$

$$3x + 15$$

factoring

$$x^3 - 5x$$

$$x(x^2 - 5)$$

$$3x^2 - 9x - 3$$

$$3(x^2 - 3x - 1)$$

Pg. 974

Pg. 976

$$(x + 2)(x + 8)$$

	x	2
x	$x^2$	$2x$
8	$8x$	16

$$x^2 + 10x + 16$$

$$x^2 + 10x + 16$$

	x	2
x	$x^2$	$2x$
8	$8x$	16

$$(x + 2)(x + 8)$$

Pg. 976

5a

$$\begin{array}{r|l}
 x & 4 \\
 \hline
 x & x^2 \\
 \hline
 5 & 20
 \end{array}$$

$$(x+4)(x+5)$$

Pg. 977

$$(x+2)(x-12)$$

$$x^2 - 12x + 2x - 24$$

$$x^2 - 10x - 24$$

$$x^2 - 10x - 24$$

$$(x+2)(x-12)$$

$P =$	$S =$
$-24$	$-10$
$1, -24$	$-23$
$2, -12$	$-10$
$3, -8$	
$4, -6$	

Pg. 978

6b

7

$$(x+4)(x-7)$$

$$2x^2 + 3x - 5$$

$$(2x+5)(x-1)$$

P =	S =
-28	-3
1, -28	-27
2, -14	-12
4, -7	-3

$$-2x + 5x$$

Pg. 980

10b

$$(x+4)(x+6)$$

$$(x-4)(x-6)$$

$$(x-4)(x+6)$$

P =	S =
24	-10
-1, 24	-25
-2, 12	-14
-3, 8	-11
-4, 6	-10

P =	S =
-24	2
-1, 24	23
-2, 12	10
-3, 8	5
-4, 6	2

Pg. 981

$$(2x + 3)(x + 4)$$

$$2x^2 + 11x + 12$$

$$2x^2 + 8x + 3x + 12$$

$$2x^2 + 11x + 12$$