



Name \_\_\_\_\_

**7-5 Additional Practice**Factoring  $x^2 + bx + c$ 

Do problems 1-9 odds only + 17a

Write the factored form of each trinomial.

①  $x^2 + 7x + 10$

2.  $x^2 + 13x + 30$

③  $x^2 + 12x + 32$

4.  $x^2 - 8x + 15$

⑤  $x^2 - 14x + 45$

6.  $x^2 - 17x + 52$

⑦  $x^2 + 9x - 10$

8.  $x^2 + x - 42$

⑨  $x^2 - 4x - 60$

10.  $x^2 + 12xy + 27y^2$

11.  $x^2 - 18xy + 56y^2$

12.  $x^2 - xy - 42y^2$

13.  $x^2 - 22xy + 85y^2$

14.  $x^2 + 15xy - 76y^2$

15.  $x^2 + 16xy + 55y^2$

16. Suppose you want to factor the expression  $x^2 + 2xn + n^2$ . Given that  $n > 0$ , what are the factors? Explain.

① 17. A parallelogram has an area of  $x^2 + 9x - 36$ .

a. What are expressions for the length and width of the parallelogram? (factor)

Bonus → b. If  $x$  is an integer, what is the least possible value of  $x$  for a parallelogram to exist? Explain.