

Feb 13

$$41. \quad b^2 + 14b + 48 \times 48$$

$$= (b+8)(b+6) + 14$$

8, 6

$$43 \quad z^2 - 20z + 100$$

$$= (z-10)(z-10) \quad \begin{matrix} \times 100 \\ + -20 \end{matrix}$$

$$= (z-10)^2 \quad -10, -10$$

45

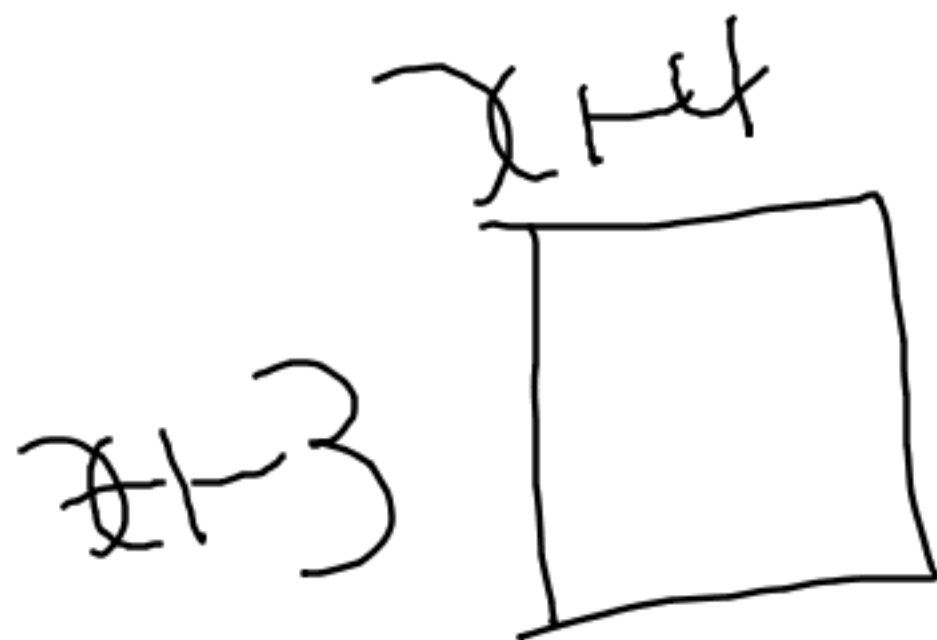
$$22 - 42 - 4$$

~~$\times$~~ $\textcircled{-4}$

not possible

$\textcircled{-4}$

$$1, 4$$
$$-2, 2$$



$$A = x^2 + 9x + 20$$

$$A = (x+5)(x+4)$$

20

$$A = L \times W$$

$$A = (x+4)(x+3)$$

$$+ 9 \quad A = x^2 + 3x + 4x + 12$$

$$3 \quad 4 \quad A = x^2 + 7x + 12$$

P. 285 Difference of Squares

Factor

$$1. a^2 - 49$$

$$= (a+7)(a-7)$$

$$= a^2 - 7a + 7a - 49$$

$$= a^2 - 49$$

3.

$$\underline{9m^2} - \underline{49}$$

$$= (3m - 7)(3m + 7)$$

5.

$$x^2 - y^2$$

$$= (x - y)(x + y)$$

$$= x^2 + x(y) - xy - y^2$$
$$= x^2 - y^2$$

$$8. (a+5)(a-5)$$

$$= a^2 - \cancel{5a} + \cancel{5a} - 25$$

$$= a^2 - 25$$

$$10. (x-9)(x+9)$$

$$= x^2 + \cancel{9x} - \cancel{9x} - 81$$

$$= x^2 - 81$$

$$13. \quad (2x-1)(2x+1)$$

$$= 4x^2 + 2x - 2x - 1$$

$$= 4x^2 - 1$$

$$18. \quad (10t-3)(10t+3)$$

$$= 100t^2 + \cancel{30t} - \cancel{30t} - 9$$

$$= 100t^2 - 9$$

23

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

FOIL
First
Outside
Inside
Last

$$= x^4 - 3x^2 + 3x^2 - 9$$

$$= x^4 - 9$$

32.

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

$$= (x^2 + x - x - 1)(x^2 + 1)$$

$$\uparrow (x^2 - 1)(x^2 + 1)$$

$$= x^4 + x^2 - x^2 - 1$$

$$x^4 - 1$$

Hwk

→ Finish box 3

→ box 4 difference of squares

hand-out 11-17