

Name

Date

period —

7.4

multiplying special cases.

1) $(y+1)^2$

$(\cancel{y}+1)(\cancel{y}+1)$ FOIL

$y^2 + y + y + 1$

$y^2 + 2y + 1$

1) $(y+1)^2$

$y^2 + 2y + 1$

3) $(h+3)^2$

$h^2 + 6h + 9$

5) $(3x+1)^2$

$9x^2 + 6x + 1$

7) $(a+5)^2$

$a^2 + 10a + 25$

2) $(n+11)^2$

$(\cancel{n}+11)(\cancel{n}+11)$ FOIL

$n^2 + 11n + 11n + 121$

$n^2 + 22n + 121$

2) $(n+11)^2$

$n^2 + 22n + 121$

4) $(2x+4)^2$

$4x^2 + 16x + 16$

6) $(5x+2)^2$

$25x^2 + 20x + 4$

8) $(k-10)^2$

$k^2 - 20k + 100$

$$9) (6p-5)^2$$

$$36p^2 - 60p + 25$$

$$40) (4m-2)^2$$

$$16m^2 - 16m + 4$$

$$11) (6m-2)^2$$

$$36m^2 - 24m + 4$$

$$12) (3m-4)^2$$

$$9m^2 - 24m + 16$$

$$13) (4x+1)^2$$

$$16x^2 + 8x + 1$$

$$14) (t-3)^2$$

$$t^2 - 6t + 9$$

$$15) (5x+1)^2$$

$$25x^2 + 10x + 1$$

$$16) (3x-2)^2$$

$$9x^2 - 6x + 4$$

$$17) (4x-2)^2$$

$$16x^2 - 16x + 4$$

$$18) 52^2$$

$$2704$$

$$17) 18^2$$

$$324$$

$$20) 6^2$$

$$36$$

$$21) 5^2$$

$$25$$

$$22) 72^2$$

$$5184$$

$$23) 151^2$$

$$22,801$$

$$24) (x+1)(x-1) \text{ Foil}$$

$$x^2 - x + x - 1$$

$$x^2 - 1 \text{ difference of squares}$$

$$25) (x+1)^2$$

$$x^2 + 2x + 1$$

$$(x+1)(x+1)$$

$$26) (x-2)(x+2)$$

$$x^2 - 4$$

$$27) (x-5)(x+5)$$

$$x^2 - 25$$

$$28) (v^2-9)(v^2+9)$$

$$v^4 - 81$$

$$29) (2x^2-7)(2x^2+7)$$

$$4x^4 - 49$$

$$30) (4d+6)(4d-6)$$

$$16d^2 - 36$$

$$31) 99,101$$

$$9999$$

$$32) 48,52$$

$$2,496$$