# What Happens If the Jolly Green Giant Steps on Your House?

For exercises in the first column, express each square as a trinomial. For the remaining exercises, factor each trinomial as the square of a binomial, if possible. (If this is not possible, the correct answer is "not possible.") Find your answer below. Write the letter of the exercise in the box containing the number of its answer.

# Express as a trinomial:

$$(E) (u + 3)^2$$

$$\bigcirc$$
  $(u-8)^2$ 

(S) 
$$(2u + 5)^2$$

(1 – 4
$$u$$
)<sup>2</sup>

$$(T) (u + 2v)^2$$

$$(U) (7u - 3v)^2$$

$$\bigcirc$$
  $(uv + 6)^2$ 

# Answers:

$$(13)$$
  $4u^2 + 20u + 25$ 

(3) 
$$4u^2 + 16u + 25$$

(9) 
$$u^2 + 6u + 9$$

(10) 
$$u^2 + 4uv + 4v^2$$

$$(14) 49u^2 - 31uv + 9v^2$$

$$(6)$$
 1 – 8 $u$  + 16 $u^2$ 

(2) 
$$u^2 - 16u + 64$$

(18) 
$$u^2v^2 + 12uv + 36$$

$$(5)$$
  $u^2 + 7uv + 4v^2$ 

86

$$(12) 49u^2 - 42uv + 9v^2$$

#### Factor:

(E) 
$$t^2 + 4t + 4$$

(U) 
$$t^2 - 12t + 36$$

(L) 
$$t^2 - 18t + 81$$

$$(Y)$$
 25 + 10 $t + t^2$ 

$$(W)$$
 4 $t^2$  + 20 $t$  + 25

$$(S)$$
 9 $t^2$  – 12 $t$  + 4

(1) 
$$t^2 + 10t + 20$$

# Answers:

- 5) not possible
- $(7) (t-9)^2$
- (19)  $(t-12)^2$
- $(4) (2t + 5)^2$
- (15)  $(t+2)^2$
- (21)  $(3t-2)^2$
- $(16) (2t 9)^2$
- $(3) (t-6)^2$
- $(1) (5 + t)^2$
- $(8) (3t-5)^2$

#### Factor:

(D) 
$$49a^2 + 14a + 1$$

(0) 
$$16a^2 - 24a + 9$$

$$\bigcirc$$
 **a**<sup>2</sup> - 8**a** + 64

(M) 
$$a^2 + 2ab + b^2$$

(H) 
$$a^2 + 10ab + 25b^2$$

(R) 
$$4a^2 - 12ab + 9b^2$$

$$(M)$$
 100 $a^2$  – 20 $ab + b^2$ 

# Answers:

- (8) not possible
- $(11) (10a 3b)^2$

$$(16) (7a + 1)^2$$

$$(11) (10a - b)^2$$

$$(20) (a + b)^2$$

$$(17) (2a - 3b)2$$

(19) 
$$(4a - 3)^2$$

$$(20) (a + 3b)^2$$

$$(14) (a + 5b)^2$$

