

Key

What Happened When the Boarding House Blew Up?

Factor each trinomial below. Find one of the factors in **each** column of binomials. Notice the letter next to one factor and the number next to the other. Write the letter in the box at the bottom of the page that contains the matching number.

- ① $3x^2 + 7x + 2$ $(3x+1)(x+2)$
- ② $2x^2 + 5x + 3$ $(2x+3)(x+1)$
- ③ $3x^2 - 16x + 5$ $(3x-1)(x-5)$
- ④ $7x^2 - 9x + 2$ $(7x-2)(x-1)$
- ⑤ $6u^2 + 5u + 1$ $(3u+1)(2u+1)$
- ⑥ $8u^2 - 9u + 1$ $(8u-1)(u-1)$
- ⑦ $10u^2 + 17u + 3$ $(5u+1)(2u+3)$
- ⑧ $9u^2 - 9u + 2$ $(3u-1)(3u-2)$
- ⑨ $5u^2 + 11u + 6$ $(5u+6)(u+1)$

- | | |
|------------|------------|
| ⑤ $(5u+3)$ | Y $(3u-2)$ |
| ③ $(x-1)$ | E $(x-5)$ |
| ⑧ $(3x+1)$ | G $(8u-1)$ |
| ⑭ $(3u-1)$ | O $(7x-2)$ |
| ⑥ $(2u+3)$ | R $(5u+1)$ |
| ⑮ $(x+1)$ | W $(x+2)$ |
| ⑨ $(5u+6)$ | L $(7x+2)$ |
| ⑦ $(2u+1)$ | I $(2x+3)$ |
| ⑪ $(3x-1)$ | E $(u+1)$ |
| ⑰ $(u-1)$ | S $(3u+1)$ |

- ⑩ $3n^2 + 2n - 1$ $(3n-1)(n+1)$
- ⑪ $5n^2 - 4n - 1$ $(5n+1)(n-1)$
- ⑫ $2n^2 + 5n - 3$ $(2n-1)(n+3)$
- ⑬ $7n^2 - 13n - 2$ $(7n+1)(n-2)$
- ⑭ $3t^2 + 14t - 5$ $(3t-1)(t+5)$
- ⑮ $4t^2 - 11t + 7$ $(4t-7)(t-1)$
- ⑯ $6t^2 + 5t - 1$ $(6t-1)(t+1)$
- ⑰ $3t^2 - 20t - 7$ $(3t+1)(t-7)$

- | | |
|------------|------------|
| ⑫ $(3t-1)$ | N $(n+3)$ |
| ⑤ $(n-1)$ | R $(t-1)$ |
| ④ $(3t+1)$ | P $(2t+1)$ |
| ⑩ $(n-2)$ | O $(n+1)$ |
| ⑬ $(t+1)$ | F $(t+5)$ |
| ② $(3n-1)$ | E $(5n+1)$ |
| ⑯ $(2n-1)$ | M $(t-7)$ |
| ④ $(3t-7)$ | R $(7n+1)$ |
| ① $(4t-7)$ | L $(6t-1)$ |

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
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Dracula:

Factor each trinomial below. Find both factors in the rectangle below and



$$\textcircled{1} \quad 6x^2 + 19x + 3 (6x + 1)(x + 3)$$

$$\textcircled{2} \quad 5x^2 - 9x - 2 (5x+1)(x-2)$$

$$\textcircled{3} \quad 9x^2 + 15x + 4 \quad (3x + 1)(3x + 4)$$

$$\textcircled{4} \quad 7x^2 + x - 8 \quad (-7x + 8)(x - 1)$$

$$\textcircled{5} \quad 2x^2 - 21x + 40 \quad (2x - 5)(x - 8)$$

$$\textcircled{6} \quad 15m^2 + 19m + 6 \quad (3m+3)(5m+2)$$

⑦ $8m^2 - 5m - 3$

$$\textcircled{8} \quad 4m^2 - 17m + 18 \quad (4m-9)(m-2)$$

$$\textcircled{9} \quad 14m^2 + 17m - 22 \quad (14m-11)(m+2)$$

⑩ $3m^2 - m - 30$

BI (4m - 9)	TH (3x + 1)	TE (m - 2)	CH (m - 3)	OP (2x - 5)	AR (3m - 10)	AN (14m - 11)	EC (2m - 3)	HS (5x + 1)
SU (6x + 1)	KI (15m + 1)	LL (x + 3)	SS (m + 2)	NG (x + 4)	NE (5m + 3)	SU (x - 2)	CK (3m + 2)	AC (9x + 2)
AB (7x + 8)	EN (3x + 4)	OU (7x + 2)	GH (8m + 3)	PI (m + 3)	NT (7m + 2)	LO (x - 8)	VE (m - 1)	OD (x - 1)

[illegible]