Elementary Algebra Skill

Factoring Trinomial Squares with Leading Coefficient Different from 1

Factor each completely.

1) $7m^2 + 6m - 1$
(7m-1)(m+1)

2) $3k^2 - 10k + 7$
(3k-7)(k-1)

3) $5x^2 - 36x - 81$
(5x+9)(x-9)

4) $2x^2 - 9x - 81$
(2x+9)(x-9)

5) $3n^2 - 16n + 20$
(3n-10)(n-2)

6) $2r^2 + 7r - 30$
(2r-5)(r+6)

7) $5k^2 + 8k + 80$
PRIME

8) $5x^2 - 14x + 8$
(5x-4)(x-2)

9) $7p^2 - 20p + 12$
(7p-6)(p-2)

10) $3v^2 + 14v - 49$
(3v-7)(v+7)

11) $7x^2 - 26x - 45$
(7x+9)(x-5)

12) $5p^2 - 52p + 20$
(5p-2)(p-10)

13) $5x^2 - 43x + 24$
(5x-3)(x-8)

14) $5x^2 + 26x + 24$
(5x+6)(x+4)

15) $3r^2 + 40r + 100$
(3r+10)(r+10)

16) $2x^2 - 3x - 5$
(2x-5)(x+1)

17) $5p^2 + 19p + 12$
(5p+4)(p+3)

18) $2m^2 + 3m - 27$
(2m+9)(m-3)

19) $3n^2 + 10n - 8$
(3n-2)(n+4)

20) $2a^2 + 7a - 7$
PRIME

21) $10n^2 - 21n - 49$
(5n+7)(2n-7)

22) $6x^2 + 41x + 70$
(2x+7)(3x+10)

23) $9x^2 + 9x - 40$
(3x-5)(3x+8)

24) $8n^2 + 71n - 90$
(8n-9)(n+10)

25) $4m^2 - 4m - 63$
(2m-9)(2m+7)

26) $6r^2 + 37r + 45$
(2r+9)(3r+5)

27) $4x^2 - 35x + 24$
(4m-3)(m-8)

28) $10m^2 + 23m + 6$
(10m+3)(m+2)

29) $6k^2 - 10k + 50$
PRIME

30) $6r^2 - 17r + 12$
(2r-3)(3r-4)