

**AC Method**

1.  $g^2 + 8g + 16$
2.  $d^2 + 12d + 32$
3.  $m^2 - 9m + 20$
4.  $f^2 - 5f + 6$
5.  $t^2 - 11t + 28$
6.  $g^2 + 7g + 12$
7.  $d^2 + 13d + 22$
8.  $m^2 - 10m + 24$
9.  $f^2 - 10f + 21$
10.  $t^2 - 13t + 30$
11.  $k^2 - 12k + 36$
12.  $c^2 - c - 72$
13.  $x^2 - x - 42$
14.  $g^2 + 4g - 21$
15.  $d^2 + 20d - 21$
16.  $m^2 - 11m - 60$
17.  $f^2 + 3f - 40$
18.  $k^2 - k - 72$
19.  $x^2 - x - 42$
20.  $g^2 + 13g - 30$
21.  $d^2 + 5d - 36$
22.  $m^2 + 7m - 60$

**AC Method**

23.  $6d^2 - 19d + 15$
24.  $3m^2 + 7m + 2$
25.  $3f^2 - 10f + 8$
26.  $4t^2 + 7t + 3$
27.  $6k^2 + 7k - 5$
28.  $8y^2 - 13y - 6$
29.  $5x^2 - 22x + 8$
30.  $2g^2 + 11g + 14$
31.  $3d^2 - 14d + 15$
32.  $15m^2 + 26m + 7$
33.  $3t^2 + 17t + 10$
34.  $7k^2 + 9k + 2$
35.  $3y^2 - 7y - 20$
36.  $7x^2 - 2x - 9$

**Factoring By Grouping**

37.  $6mn - 9m - 4n + 6$
38.  $2e^2f - 12ef + 3e - 18$
39.  $xz + xw + yz + yw$
40.  $2c^2d + 9c + 6cd + 3c^2$
41.  $3j - 5j^2 - 6k + 10jk$
42.  $3b^2 - 9b - bt + 3t$
43.  $2ac + ad + 6bc + 3bd$

**Difference of Squares**

44.  $4r^2 - 9$
45.  $225p^2 - 529y^2$
46.  $625m^2 - 1$
47.  $324h^2 - 289f^2$
48.  $4 - 169j^2$
49.  $256d^2 - 25w^2$
50.  $49 - 361y^2$
51.  $x^2 - y^2$
52.  $4w^2 - x^2y^2z^2$
53.  $225y^2 - 64h^2$

**Perfect Squares**

54.  $25t^2 + 30t + 9$
55.  $225p^2 - 690py + 529y^2$
56.  $625m^2 + 50m + 1$
57.  $16h^2 - 56hf + 49f^2$
58.  $4 - 52j + 169j^2$
59.  $a^2 - 24a + 144$
60.  $49 - 266y + 361y^2$
61.  $x^2 - 2xy + y^2$
62.  $25w^2 + 70w + 49$
63.  $81h^2 + 378hq + 441q^2$

**Combination Factoring**

64.  $10x^3 + 25x^2$
65.  $2ax + 6xc + ba + 3bc$
66.  $a^2 - 2ab + a - 2b$
67.  $64x^2 - 80x + 25$
68.  $625x^4 - 81y^4$
69.  $48z^4 - 3x^4$
70.  $484p^2 - 220p + 25$
71.  $3x^3 - 27x$
72.  $2l^3 - 13l^2 - 24l$
73.  $12x^2 - 40x + 12$
74.  $16x^2 + 40xy + 25y^2$
75.  $x^2 + 14x + 33$
76.  $2x^2 + 5x + 2$
77.  $15x^2 - 13x + 2$
78.  $16 - m^4$
79.  $81p^4 - 16g^4$
80.  $4x^3 + 20x^2 - 9x - 45$
81.  $18h^4 + 12h^3 - 30h^2$
82.  $1250 - 722a^2$
83.  $3x^3 - 27x$
84.  $2j^3 - 13j^2 - 24j$
85.  $18x^3 - 27x^2 - 50x + 75$

**Solving**

86.  $y^2 + 13y + 40 = 0$
87.  $p^2 = 5p + 24$
88.  $m^2 + 36m = 0$
89.  $49m^3 - 126m^2 + 81m = 0$
90.  $l^2 - 13l + 36 = 0$
91.  $g(g - 5) = 0$
92.  $(3x - 4)(4x + 7) = 0$
93.  $7(x + 2)(x - 3) = 0$
94.  $3f(2f - 5)(3f + 1) = 0$
95.  $(2m + 3)(m + 4) = 3m + 6$
96.  $(3w + 2)(w + 3) = w + 14$
97.  $(g - 1)(g - 1) = 36$
98.  $\frac{t^2}{12} - \frac{2}{3}t - 4 = 0$