

HW 12

AAT

P42

12. $3z(z^2 - 2z + 3)$

31. $(3u - 2v)(3u + 2v)$

32. $(35 - 4y)(5 + 4y)$

37. $(5y - 1)(5y - 1)$

68. $a \cdot c = 12$

$$\begin{aligned} &12x^2 + 4x + 3x + 1 \\ &4x(3x + 1) + 1(3x + 1) \\ &(3x + 1)(4x + 1) \end{aligned}$$

69. $a \cdot c = -18$

$$\begin{aligned} &-9z^2 + 6z - 3z + 2 \\ &-3z(3z - 2) - 1(3z - 2) \\ &(-3z - 1)(3z - 2) \end{aligned}$$

70. $a \cdot c = -30$

$$\begin{aligned} &-5u^2 - 15u + 2u + 6 \\ &-5u(3u + 3) + 2(u + 3) \\ &(-5u + 2)(u + 3) \end{aligned}$$

71. $x^3 - x^2 + 2x - 2$
 $x^2(x - 1) + 2(x - 1)$
 $(x^2 + 2)(x - 1)$

72. $x^3 + 5x^2 - 5x - 25$
 $x^2(x + 5) - 5(x + 5)$
 $(x^2 - 5)(x + 5)$

73. $2x^3 - x^2 - 6x + 3$
 $x^2(2x - 1) - 3(2x - 1)$
 $(x^2 - 3)(2x - 1)$

74. $5x^3 - 10x^2 + 3x - 6$
 $5x^2(x - 2) + 3(x - 2)$
 $(5x^2 + 3)(x - 2)$

85. $6(x^2 - 9)$
 $6(x - 3)(x + 3)$

86. $12(x^2 - 4)$
 $12(x - 2)(x + 2)$

87. $x^2(x - 1)$

91. $(x - 1)(x - 1)$

93. $4x^2 - 4x + 1$

$$\begin{aligned} &4x^2 - 2x - 2x + 1 \\ &2x(2x - 1) - 1(2x - 1) \\ &(2x - 1)(2x - 1) \end{aligned}$$