KEEP ON FACTORING

FACTOR COMPLETELY

1. $12x^2y^3 - 18x^3y^2 - 24x^2y^2$
2. $\frac{1}{4}m^{-2}n^3 + \frac{1}{2}m^5n$
3. $4t(m+n) + 5s(m+n)$
4. $(x+2)(x-2) + 3(x+2)$
5. $(x+3)^2 - 2(x+3)$
6. $y^2 + 1 - y^3 - y$
7. $a^2 + 6bc - 3ac - 2ab$
8. $a^2b^2 - 7ba^2 + 6a^2 - 4b^2 + 28b - 24$
9. $n^2 - 10n + 16$
10. $4t^2 - 13t + 10$
11. $6w^2 + 13w - 28$
12. $12x^2 - 2x - 30$
13. $49s^2 - 56st + 16t^2$
14. $100m^2 - 121n^2$
15. $36x^6 - 25y^4$
16. $x^2 + 6xy + 9y^2 - 36$
17. $25y^2 - 30y + 9 - 4c^2 - 4cd - d^2$
18. $8a^2 - 32$
19. $x^{4n} - y^{6n}$
20. $-4xy^2 - 4xy - x$

Solutions

1. $6x^2y^2(2y - 3x - 4)$
2. $\frac{n}{4m^2}(n^2 + 2m^7)$
3. $(4t + 5s)(m + n)$
4. $(x+2)(x+1)$
5. $(x+3)(x+1)$
6. $(y^2+1)(1-y)$
7. $(a - 2b)(a - 3c)$
8. $(a+2)(a-2)(b-6)(b-1)$
9. $(n-8)(n-2)$
10. $(t-2)(4t-5)$
11. $(2w+7)(3w-4)$
12. $2(3x-5)(2x+3)$
13. $(7s-4t)^2$
14. $(10m+11n)(10m-11n)$
15. $(6x^3+5y^2)(6x^3-5y^2)$
16. $(x+3y+6)(x+3y-6)$
17. $(5y+2c+d-3)(5y-2c-d-3)$
18. $8(a-2)(a+2)$
19. $(x^{2n}+y^{3n})(x^{2n}-y^{3n})$
20. $-x(2y+1)^2$