ANSWERS TO FACTORING PRACTICE

X. Factoring: Putting It All Together

1. $2(x+2)(x-2)$
2. $2(x+3)(x+1)$
3. $3(n+5)(n-2)$
4. $2(3x+2)(x-5)$
5. $2(x+10)(x-4)$
6. $5(t+1)(t+2)$
7. $2(2n+3)(2n-3)$
8. $7(2x+3)(x-1)$
9. $4(x+2)^2$
10. $2x(3+x)^2$ *or* $2x(x+3)^2$
11. $2x(1+y)(1-y)$
12. $3t(t+3)(t-3)$
13. $3(2a-1)(4a-3)$
14. $5(2x-1)(x+2)$
15. $3(x-7)^2$

ANSWERS TO FACTORING PRACTICE

10. $4x(x+1)(x-1)$

XI. …More Factoring: Putting It All Together

1. $8(2x+1)(x-3)$
2. $3(3x-2)^2$
3. $5(x-14)(x+2)$
4. $6m(m^2+9m-1)$
5. $k^2(5k-2)(k+2)$
6. $x^2(y^2+x^2)(y+x)(y-x)$
7. $(y^2-8)(y^2+2)$
8. $(x^2+1)(x+2)(x-2)$
9. $[h+(a-3)][h-(a-3)]$ *or* $(h+a-3)(h-a+3)$
10. $(9x^2+4y^2)(3x+2y)(3x-2y)$
11. $mn^2(2-m)^2$ *or* $mn^2(m-2)^2$
12. $[(2a+3)+(a-1)][(2a+3)-(a-1)]$ *or* $(3a+2)(a+4)$
13. $(2d^2+1)^2(2d^2-1)^2$
14. $(x-2)^3(x-2)$

ANSWERS TO FACTORING PRACTICE

XII. Extra: Factoring by Grouping

1. $(x+2)(x+y)$
2. $(a-2)(3a+b)$
3. $(t-1)(t^2+1)$
4. $(5+t)(2-s)$
5. $(c\cdot -7)\left(\frac{2}{3}b+1\right)$
6. $(2u+1)(2u+v)$
7. $(d+3)(a-d)$
8. $(n+2)(n+3m)$
9. $(x-y)(x+y)(2a+b)$
10. $(z-y)(z+y)^2$
11. $(y-1)(y+2)(y-2)$
12. $(a+b)(x+4)(x-4)$
13. $(x+1)^2(x-1)$
14. $(a-1)(a^2-8)$