

# Factoring Frenzy A

Fold the paper to hide the answers.

Factor the expression completely.

| Factor the expression. | Answers                  |
|------------------------|--------------------------|
| 1. $n^2 + 6n + 5$      | 1. $(n + 5)(n + 1)$      |
| 2. $n^2 + 7n + 10$     | 2. $(n + 5)(n + 2)$      |
| 3. $n^2 - 7n + 12$     | 3. $(n - 3)(n - 4)$      |
| 4. $n^2 - 121$         | 4. $(n - 11)(n + 11)$    |
| 5. $n^2 + 2n - 15$     | 5. $(n + 5)(n - 3)$      |
| 6. $n^2 - 5n - 24$     | 6. $(n - 8)(n + 3)$      |
| 7. $n^2 - 24n + 144$   | 7. $(n - 12)^2$          |
| 8. $3x^2 + 13x + 10$   | 8. $(x + 1)(3x + 10)$    |
| 9. $2x^2 - x - 21$     | 9. $(2x - 7)(x + 3)$     |
| 10. $9x^2 + 30x + 25$  | 10. $(3x + 5)^2$         |
| 11. $6x^2 + 5x - 4$    | 11. $(3x + 4)(2x - 1)$   |
| 12. $4x^2 - 49y^2$     | 12. $(2x + 7y)(2x - 7y)$ |
| 13. $2x^2 - x - 6$     | 13. $(2x + 3)(x - 2)$    |
| 14. $16x^2 - 56x + 49$ | 14. $(4x - 7)^2$         |
| 15. $3x^2 - 7x - 6$    | 15. $(x - 3)(3x + 2)$    |

# Factoring Frenzy B

Fold the paper to hide the answers.

Factor out GCF; then factor again if possible.

| Factor the expression.   | Answers                  |
|--------------------------|--------------------------|
| 1. $2x^2 + 22x + 36$     | 1. $2(x + 2)(x + 9)$     |
| 2. $5x^2 - 10x - 40$     | 2. $5(x - 4)(x + 2)$     |
| 3. $10x^2 - 25x - 35$    | 3. $5(x + 1)(2x - 7)$    |
| 4. $12u^2 - 28u - 24$    | 4. $4(3u + 2)(u - 3)$    |
| 5. $3x^2 - 15x + 18$     | 5. $3(x - 2)(x - 3)$     |
| 6. $x^3 + 11x^2 + 10x$   | 6. $x(x + 10)(x + 1)$    |
| 7. $8x^3 - 18x$          | 7. $2x(2x - 3)(2x + 3)$  |
| 8. $5x^3 - 40x^2 + 60x$  | 8. $5x(x - 2)(x - 6)$    |
| 9. $4x^2 + 8x - 60$      | 9. $4(x + 5)(x - 3)$     |
| 10. $2x^3 - 20x^2 - 48x$ | 10. $2x(x - 12)(x + 2)$  |
| 11. $4m^2 - 18m + 14$    | 11. $2(2m - 7)(m - 1)$   |
| 12. $81x^2 - 36$         | 12. $9(3x + 2)(3x - 2)$  |
| 13. $15m^2 - 10m - 25$   | 13. $5(3m - 5)(m + 1)$   |
| 14. $50m^3 - 2m$         | 14. $2m(5m + 1)(5m - 1)$ |
| 15. $3m^2 - 10m + 8$     | 15. $(3m - 4)(m - 2)$    |
| 16. $60m^3 + 54m^2 - 6m$ | 16. $6m(10m - 1)(m + 1)$ |