1. Distribute to expand into a sum.

$(x + 1)(x - 1) =$

$(x + 2)(x - 2) =$

$(x + 3)(x - 3) =$

$(x + 4)(x - 4) =$

$(x + 5)(x - 5) =$

$(x + 6)(x - 6) =$

$(x + 7)(x - 7) =$

$(x + 8)(x - 8) =$

$(x + 10)(x - 10) =$

2. Factor into a product of sums/differences.

$x^2 - 1 =$

$x^2 - 4 =$

$x^2 - 9 =$

$x^2 - 16 =$

$x^2 - 25 =$

$x^2 - 36 =$

$x^2 - 49 =$

$x^2 - 64 =$

$x^2 - 100 =$

$x^2 - 121 =$

$x^2 - 144 =$

$x^2 - 10{,}000 =$

3. Distribute to expand.

$10(x + 1)(x - 1) =$

$5(x + 1)(x - 1) =$

$2(x + 1)(x - 1) =$

$10(x + 8)(x - 8) =$

$5(x + 8)(x - 8) =$

4. Factor.

$10x^2 - 10 =$

$5x^2 - 5 =$

$2x^2 - 2 =$

$10x^2 - 640 =$

$2x^2 - 128 =$

$3x^2 - 27 =$

5. Distribute to expand.

$x(x + 1)(x - 1) =$

$x(x + 2)(x - 2) =$

$x(x + 3)(x - 3) =$

$x(x + 5)(x - 5) =$

$x(x + 10)(x - 10) =$

6. Factor.

$x^3 - x =$

$x^3 - 4x =$

$x^3 - 9x =$

$x^3 - 25x =$

$x^3 - 64x =$

$x^3 - 81x =$

7. Factor.

$x^4 - 1 =$

$x^4 - 4 =$

$x^4 - 9 =$

8. Distribute to expand.

$(x + \sqrt{2})(x - \sqrt{2}) =$

$(x + \sqrt{3})(x - \sqrt{3}) =$

$(x + \sqrt{5})(x - \sqrt{5}) =$

9. Factor.

$x^2 - 2 =$

$x^2 - 3 =$

$x^2 - 5 =$

$x^2 - 7 =$

$x^2 - 13 =$

10. Distribute to expand.

$(1 + x)(1 - x) =$

$(2 + x)(2 - x) =$

$10(1 - x)(1 + x) =$

$5(2 - x)(2 + x) =$

$(\sqrt{2} + x)\ (\sqrt{2} - x) =$

$(\sqrt{11} - x)\ (\sqrt{11} + x) =$

$(1 + x^2)(1 - x^2) =$

$(5 - x^2)(5 + x^2) =$

11. Factor.

$1 - x^2 =$

$9 - x^2 =$

$64 - x^2 =$

$640 - 10x^2 =$

$2 - x^2 =$

$3 - x^2 =$

$25 - x^4 =$

$5 - x^4 =$

$25 - 5x^4 =$