

Factoring Special Cases

DAY 9

Factor each completely.

1) $16n^2 - 9$

$(4n + 3)(4n - 3)$

2) $4m^2 - 25$

$(2m + 5)(2m - 5)$

3) $16b^2 - 40b + 25$

$(4b - 5)^2$

4) $4x^2 - 4x + 1$

$(2x - 1)^2$

5) $9x^2 - 1$

$(3x + 1)(3x - 1)$

6) $n^2 - 25$

$(n + 5)(n - 5)$

7) $n^4 - 100$

$(n^2 + 10)(n^2 - 10)$

8) $a^4 - 9$

$(a^2 + 3)(a^2 - 3)$

9) $k^4 - 36$

$(k^2 + 6)(k^2 - 6)$

10) $n^4 - 49$

$(n^2 + 7)(n^2 - 7)$

DAY 9

11) $98n^2 - 200$

$$2(7n + 10)(7n - 10)$$

12) $3 + 6b + 3b^2$

$$3(1 + b)^2$$

13) $400 - 36v^2$

$$4(10 + 3v)(10 - 3v)$$

14) $100x^2 + 180x + 81$

$$(10x + 9)^2$$

15) $10n^2 + 100n + 250$

$$10(n + 5)^2$$

16) $49n^2 - 56n + 16$

$$(7n - 4)^2$$

17) $49x^2 - 100$

$$(7x + 10)(7x - 10)$$

18) $1 - r^2$

$$(1 + r)(1 - r)$$

19) $10p^3 - 1960p$

$$10p(p + 14)(p - 14)$$

20) $343b^2 - 7b^4$

$$7b^2(7 + b)(7 - b)$$

21) $81v^4 - 900v^2$

$$9v^2(3v + 10)(3v - 10)$$

22) $200m^4 + 80m^3 + 8m^2$

$$8m^2(5m + 1)^2$$