

Name:

Date:

Period:

D.O.T.S.

Each letter of D.O.T.S. is a clue to help you recognize this type of factoring.

Difference (means subtraction)

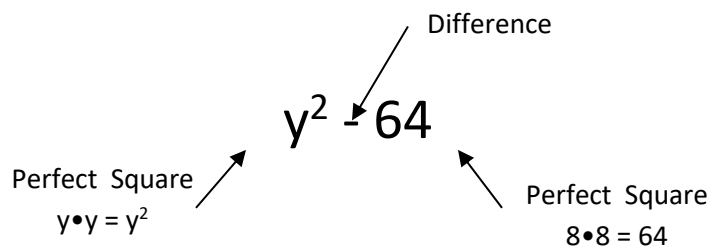
Of

Two (only 2 terms - binomial)

Squares (Both terms are PERFECT SQUARES)

Refresher...List out the perfect squares...

Example: Factor



To factor (remember, factoring is working backwards):

- (1) Double Bubble: () ()
- (2) Different signs in the Double Bubble: (+) (-)
- (3) Take the square root of both perfect squares and place them in the appropriate order in the parenthesis:
 $(y + 8)(y - 8)$
- (4) You can always check your answer by FOIL to see if you are correct

Factor the following:

1. $b^2 - 25$	4. $w^2 - \frac{1}{64}$	7. $81m^2n^2 - 49x^2y^2$
2. $c^2 - 100$	5. $25m^2 - n^2$	8. $x^2y^8 - 144a^6b^{10}$
3. $121 - m^2$	6. $\frac{1}{9}r^2 - \frac{64s^2}{121}$	9.* $x^4 - y^4$

Factor the following using GCF Factoring or Difference of Two Squares (DOTS).

1. $36x^2 - 49$	2. $7x + 14y$	3. $9x^2 - 1$
4. $18x^4 - 13x^3$	5. $144y^2 - 49$	6. $20x^2 + 35x - 50$
7. $81 - R^2$	8. $5y^3 + 15y^2$	9. $4x^2 - 9$
10. $12x^2y + 9$	11. $y^2 - 144$	12. $8x - 7x^2$
13. $14x^2 + 10x + 2$	14. $a^2b^2 - 1$	15. $16 - 25x^2$
16. $6x^3y^2 - 15x^2y^5$	17. $4a^2 - b^2$	18. $33abc + 44a^2bd$
19. $5x^2yz^3 + 15xy^2z^2 - 20xyz^2$	20. $x^2 - y^2$	21. $49a^2b^2 - 36$
22. $121m^2 - 64n^2$	23. $12mn^2 + 18m^2n - 24mn$	24. $x^2 - 100$