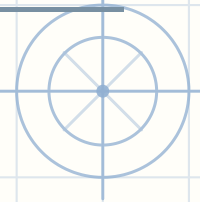


Difference of two squares — Both forms

Name: _____

Date: _____

Each one is a difference of two squares. Fill in the missing number.



1 $x^2 - 256 = (x + \underline{\quad}) (x - \underline{\quad})$

2 $9x^2 - 400 = (\underline{\quad}x + 20) (\underline{\quad}x - 20)$

3 $81x^2 - 289 = (\underline{\quad}x + 17) (\underline{\quad}x - 17)$

4 $121x^2 - 784 = (\underline{\quad}x + 28) (\underline{\quad}x - 28)$

5 $x^2 - 64 = (x + \underline{\quad}) (x - \underline{\quad})$

6 $121x^2 - 100 = (\underline{\quad}x + 10) (\underline{\quad}x - 10)$

7 $121x^2 - 961 = (\underline{\quad}x + 31) (\underline{\quad}x - 31)$

8 $x^2 - 576 = (x + \underline{\quad}) (x - \underline{\quad})$

9 $x^2 - 100 = (x + \underline{\quad}) (x - \underline{\quad})$

10 $49x^2 - 484 = (\underline{\quad}x + 22) (\underline{\quad}x - 22)$



Difference of two squares · Both forms — Answer key

1. $x^2 - 256 = (x + 16)(x - 16)$ (256 is 16 squared, so the two brackets are $(x + 16)$ and $(x - 16)$)

2. $9x^2 - 400 = (3x + 20)(3x - 20)$ ($9x^2$ is $3x$ squared, so the two brackets start $3x$ rather than $9x$)

3. $81x^2 - 289 = (9x + 17)(9x - 17)$ ($81x^2$ is $9x$ squared, so the two brackets start $9x$ rather than $81x$)

4. $121x^2 - 784 = (11x + 28)(11x - 28)$ ($121x^2$ is $11x$ squared, so the two brackets start $11x$ rather than $121x$)

5. $x^2 - 64 = (x + 8)(x - 8)$ (64 is 8 squared, so the two brackets are $(x + 8)$ and $(x - 8)$)

6. $121x^2 - 100 = (11x + 10)(11x - 10)$ ($121x^2$ is $11x$ squared, so the two brackets start $11x$ rather than $121x$)

7. $121x^2 - 961 = (11x + 31)(11x - 31)$ ($121x^2$ is $11x$ squared, so the two brackets start $11x$ rather than $121x$)

8. $x^2 - 576 = (x + 24)(x - 24)$ (576 is 24 squared, so the two brackets are $(x + 24)$ and $(x - 24)$)

9. $x^2 - 100 = (x + 10)(x - 10)$ (100 is 10 squared, so the two brackets are $(x + 10)$ and $(x - 10)$)

10. $49x^2 - 484 = (7x + 22)(7x - 22)$ ($49x^2$ is $7x$ squared, so the two brackets start $7x$ rather than $49x$)