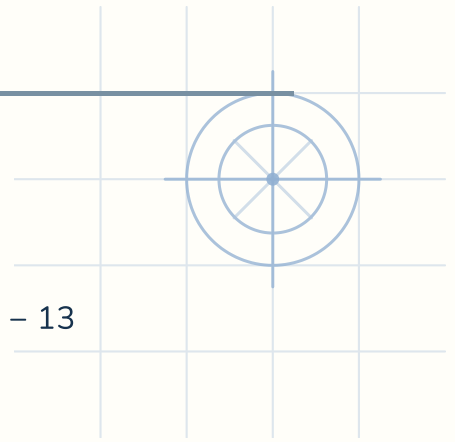


Difference of two squares — A sum times a difference

Name: _____

Date: _____

Multiply out and simplify. Each pair is a sum times a difference.



1 $(x + 20)(x - 20) + 18$

2 $(x + 7)(x - 7) - 13$

3 $(x + 26)(x - 26) + 6$

4 $(x + 8)(x - 8) - 1$

5 $(x + 25)(x - 25) - 8$

6 $(x + 3)(x - 3) + 8$

7 $(x + 3)(x - 3) + 5$

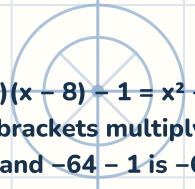
8 $(x + 38)(x - 38) - 3$

9 $(x + 10)(x - 10) - 20$

10 $(x + 16)(x - 16) - 7$



Difference of two squares · A sum times a difference — Answer key



1. $(x + 20)(x - 20) + 18 = x^2 - 382$ (the brackets multiply to $x^2 - 400$, and $-400 + 18$ is -382)

2. $(x + 7)(x - 7) - 13 = x^2 - 62$ (the brackets multiply to $x^2 - 49$, and $-49 - 13$ is -62)

3. $(x + 26)(x - 26) + 6 = x^2 - 670$ (the brackets multiply to $x^2 - 676$, and $-676 + 6$ is -670)

4. $(x + 8)(x - 8) - 1 = x^2 - 65$ (the brackets multiply to $x^2 - 64$, and $-64 - 1$ is -65)

5. $(x + 25)(x - 25) - 8 = x^2 - 633$ (the brackets multiply to $x^2 - 625$, and $-625 - 8$ is -633)

6. $(x + 3)(x - 3) + 8 = x^2 - 1$ (the brackets multiply to $x^2 - 9$, and $-9 + 8$ is -1)

7. $(x + 3)(x - 3) + 5 = x^2 - 4$ (the brackets multiply to $x^2 - 9$, and $-9 + 5$ is -4)

8. $(x + 38)(x - 38) - 3 = x^2 - 1447$ (the brackets multiply to $x^2 - 1444$, and $-1444 - 3$ is -1447)

9. $(x + 10)(x - 10) - 20 = x^2 - 120$ (the brackets multiply to $x^2 - 100$, and $-100 - 20$ is -120)

10. $(x + 16)(x - 16) - 7 = x^2 - 263$ (the brackets multiply to $x^2 - 256$, and $-256 - 7$ is -263)