

Factoring Trinomials: $x^2 + bx + c$

$$k^2 - k - 20 = (k)^2 + (4 + -5)k + (4)(-5) = (k + 4)(k - 5)$$

Factor, write prime if prime.

1. $x^2 + 7x + 12 =$

11. $51 - 20k + k^2 =$

2. $m^2 + 10m + 21 =$

12. $a^2 - 14ab + 24b^2 =$

3. $y^2 - 7y - 8 =$

13. $y^2 + 6y - 72 =$

4. $x^2 - 6x + 5 =$

14. $x^2 - 11xy + 60y^2 =$

5. $x^2 + 4x - 32 =$

15. $15r^2 + 2rs - s^2 =$

6. $x^2 - 2x - 15 =$

16. $3x^2 + 21xy - 54y^2 =$
Hint: Check for GCF.

7. $x^2 - 6x + 8 =$

17. $x^2 - 5xy - 6y^2 =$

8. $y^2 + 9y + 18 =$

18. $x^2 + 8xy + 12y^2 =$

9. $3 - 4t + t^2 =$

19. $y^2 - 7xy + 10x^2 =$

10. $v^2 + 12v + 20 =$

20. $a^2 - 11ab - 60b^2 =$