

# Worksheet on Factoring Trinomials with 1 as Leading Coefficient

## A. True or False

Write True if the statement is true or False if it is false. One point each.

1.  $x^2 + 7x + 10 = (x + 2)(x + 5)$

4.  $x^2 + 9x + 14 = (x - 2)(x - 7)$

2.  $x^2 + 2x - 15 = (x + 3)(x - 5)$

3.  $x^2 - 5x - 24 = (x + 3)(x - 8)$

5.  $x^2 - 5x + 6 = (x - 3)(x - 2)$

## B. Factoring Trinomials with 1 as Leading Coefficient

Factor each polynomial completely. Write the final answers only. One point each.

1.  $b^2 + 8b + 7$

6.  $n^2 - n - 56$

2.  $m^2 + m - 90$

7.  $b^2 - 6b + 8$

3.  $n^2 - 10n + 9$

8.  $2n^2 + 6n - 108$

4.  $m^2 + 2m - 24$

9.  $2k^2 + 22k + 60$

5.  $k^2 - 13k + 40$

10.  $2p^2 + 2p - 4$

## C. Fill in the Blank

Factor each polynomial completely then supply the missing terms. One point each.

1.  $n^2 - 11n + 10 = (\underline{\hspace{1cm}} - 10)(n - 1)$

2.  $n^2 + 4n - 12 = (n - 2)(n + \underline{\hspace{1cm}})$

3.  $a^2 + 11a + 18 = (a + 2)(a + \underline{\hspace{1cm}})$

4.  $n^2 - 5n + 6 = (n - \underline{\hspace{1cm}})(n - 3)$

5.  $n^2 + 6n + 8 = (n + 2)(n + \underline{\hspace{1cm}})$

6.  $5n^2 + 25n + 20 = \underline{\hspace{1cm}}(n + 4)(n + 1)$

7.  $a^2 - a - 90 = (a - \underline{\hspace{1cm}})(a + 9)$

8.  $4v^2 - 4v - 8 = 4(v + 1)(v - \underline{\hspace{1cm}})$

9.  $v^2 - 7v + 10 = (v - 5)(v - \underline{\hspace{1cm}})$

10.  $6v^2 + 66v + 60 = \underline{\hspace{1cm}}(v + 10)(v + 1)$