

Practice Problem Set

ANSWER KEY

Factor each trinomial using the AM method.

1. $x^2 + 8x + 15$ Multiply to 15 1, 15 -1, -15
 $(x + 3)(x + 5)$ Add to 8 3, 5 -3, -5

2. $x^2 + 9x + 18$ Multiply to 18 1, 18 -1, -18
 $(x + 3)(x + 6)$ Add to 9 2, 9 -2, -9
3, 6 -3, -6

3. $x^2 + 14x + 24$ Multiply to 24 1, 24 -1, -24
 $(x + 2)(x + 12)$ Add to 14 2, 12 -2, -12
3, 8 -3, -8
4, 6 -4, -6

4. $x^2 - 10x + 9$ Multiply to 9 1, 9 -1, -9
 $(x - 1)(x - 9)$ Add to -10 3, 3 -3, -3

5. $x^2 - 8x - 20$ Multiply to -20 -1, 20 1, -20
 $(x + 2)(x - 10)$ Add to -8 -2, 10 2, -10
-4, 5 4, -5

6. $x^2 + 1x - 12$ Multiply to -12 -1, 12 1, -12
 $(x - 3)(x + 4)$ Add to 1 -2, 6 2, -6
-3, 4 3, -4

NEED MORE PRACTICE BEFORE THE CHECK-IN: TRY THE PROBLEMS BELOW.

Factor each trinomial using the AM method.

7. $x^2 + 22x + 40$

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

9. $x^2 - 15x + 50$

10. $x^2 - 10x + 21$

11. $x^2 - 2x - 3$

12. $x^2 - x - 42$

ANSWER KEY BELOW



7. $(x + 2)(x + 20)$	8. $(x + 7)(x - 1)$	9. $(x - 5)(x - 10)$
10. $(x - 3)(x - 7)$	11. $(x - 3)(x + 1)$	12. $(x - 7)(x + 6)$