Practice 3.1.3: Factoring Expressions with $a = 1$ A

For problems 1–7, factor each expression as much as possible. If the expression cannot be factored, write "not factorable."

1. $y^2 - 100$

2. $x^2 - 9x + 14$

3. $x^2 + 16x + 64$

4. $b^2 + 4$

5. $7a^2 - 28$

6. $4x^2 + 32x - 36$

7. $6x^2 - 54y^2$

For problems 8–10, each expression represents the area of a rectangle or square. Factor each expression to find the expressions that represent the length and width of each figure.

8. $(a^2 - 14a + 49)$ square feet

9. $(4x^2 - 25)$ square meters

10. $(y^2 + 3y - 10)$ square inches