COMPLETING THE SQUARE

In questions 1-4 and 6-13, write the number to be added to complete the square.

1
$$x^2 + 4x$$

2
$$x^2 - 6x$$

3
$$x^2 + 14x$$

3
$$x^2 + 14x$$
 4 $x^2 + 2x$

6
$$x^2 - x$$

7
$$x^2 + 5x$$

8
$$x^2 + 3x$$

9
$$x^2 - 7x$$

COMPLETING THE SQUARE

10
$$x^2 + x$$

11
$$x^2 + 2ax$$

12
$$x^2 - 2bx$$
 13 $x^2 + cx$

13
$$x^2 + cx$$

14 The square is completed for the expression $x^2 - ax$. Indicate whether the following statements would be correct or incorrect.

(a)
$$x^2 - ax + \frac{a^2}{2}$$
 (b) $x^2 - ax + \frac{a^2}{4}$ (c) $\left(x - \frac{a}{2}\right)^2$ (d) $x^2 - ax + a^2$

(b)
$$x^2 - ax + \frac{a^2}{4}$$

(c)
$$\left(x-\frac{a}{2}\right)^2$$

(d)
$$x^2 - ax + a^2$$