

## Completing the Square

Write in completed square form:

1.  $x^2 + 6x$

2.  $x^2 + 8x$

3.  $x^2 - 8x$

4.  $x^2 - 9x$

5.  $x^2 - 3x$

6.  $x^2 - 3x - 1$

7.  $x^2 - 3x + 1$

8.  $x^2 + 3x + 1$

9.  $2x^2 + 6x + 2$

10.  $2x^2 + 5x + 2$

11.  $2x^2 + x + 2$

12.  $3x^2 + x + 2$

13.  $3x^2 + x - 10$

14.  $4x^2 + x - 10$

15.  $-4x^2 + x - 10$

16.  $-4x^2 + x - 1$

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16.  $-4x^2 + x - 1$

## Completing the square: ANSWERS

1.  $(x + 3)^2 - 9$

2.  $(x + 4)^2 - 16$

3.  $(x - 4)^2 - 16$

4.  $(x - \frac{9}{2})^2 - \frac{81}{4}$

5.  $(x - \frac{3}{2})^2 - \frac{9}{4}$

6.  $(x - \frac{3}{2})^2 - \frac{13}{4}$

7.  $(x - \frac{3}{2})^2 - \frac{5}{4}$

8.  $(x + \frac{3}{2})^2 - \frac{5}{4}$

9.  $2(x + \frac{3}{2})^2 - \frac{5}{2}$

10.  $2(x + \frac{5}{4})^2 - \frac{9}{8}$

11.  $2(x + \frac{1}{4})^2 + \frac{15}{8}$

12.  $3(x + \frac{1}{6})^2 + \frac{23}{12}$

13.  $3(x + \frac{1}{6})^2 - \frac{121}{12}$

14.  $4(x + \frac{1}{8})^2 - \frac{161}{16}$

15.  $-4(x - \frac{1}{8})^2 - \frac{159}{16}$

16.  $-4(x - \frac{1}{8})^2 - \frac{15}{16}$

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