

Name:

Date:

Period:

Complete the square to form a perfect square trinomial. Then factor the trinomial.

1. $m^2 + 10m + \underline{\hspace{2cm}}$
 $\underline{\hspace{4cm}}$

2. $g^2 - 20g + \underline{\hspace{2cm}}$
 $\underline{\hspace{4cm}}$

3. $y^2 + 2y + \underline{\hspace{2cm}}$
 $\underline{\hspace{4cm}}$

4. $w^2 - 11w + \underline{\hspace{2cm}}$
 $\underline{\hspace{4cm}}$

5. $b^2 + 12b + \underline{\hspace{2cm}}$
 $\underline{\hspace{4cm}}$

6. $z^2 - 26z + \underline{\hspace{2cm}}$
 $\underline{\hspace{4cm}}$

Solve each equation by completing the square.

1. $x^2 + 18x - 175 = 0$

2. $r^2 - 4r = 165$

3. $y^2 + 19y + 78 = 0$

4. $x^2 - 19x + 84 = 0$

5. $t^2 - 2t - 224 = 0$

6. $x^2 + 15x = -56$

7. $g^2 + 3g = -6$

8. $p^2 - 3p = 18$

9. $z^2 = 6z - 2$

10. $x^2 + 25 = 10x$