

Name:  
Period:

## Writing Quadratic Equations Worksheet

Write an equation that has the given solutions/roots

①  $x = 5, -7$

②  $x = 2, -8$

③  $x = 4, -3$

④  $x = -12, -1$

⑤  $x = \frac{1}{2}, -12$

⑥  $x = \frac{4}{5}, -3$

Solve using the quadratic equation

⑦  $7x^2 - 6x + 3 = 0$

⑧  $2x + 8 = -x^2$

⑨  $x^2 - x - 1 = 0$

Solve (using  $t$  substitution)

⑩  $x^4 - 2x^2 - 35 = 0$

⑪  $(x-1)^2 - 6(x-1) - 16 = 0$