Math-3A   Name_____ ID: 1
SM3A HW 6-10 Review Solving Quadratics   Date_____ Period_____

Solve each equation by factoring.

1) $a^2 - 2 = -a$

2) $n^2 + 16 = -8n$

3) $n^2 + 6 = 5n$

4) $x^2 = -2x + 8$

5) $5a^2 = 15 - 22a$

6) $4n^2 - 33n = -8$

7) $7b^2 = 39b + 18$

8) $5x^2 - 13x = 28$

Solve each equation by taking square roots.

9) $8v^2 - 10 = -30$

10) $36x^2 + 2 = 83$

11) $-6 + 16n^2 = 10$

12) $10x^2 - 7 = -196$

Solve each equation by completing the square.

13) $r^2 + 16r + 5 = 0$

14) $n^2 - 12n - 27 = 0$

15) $a^2 + 12a - 63 = 0$

16) $p^2 + 4p - 39 = 0$

Find each product.

17) $(n^2 + 3n + 5)(7n - 4)$

18) $(7x^2 + 4x + 6)(4x - 3)$

Divide.

19) $(-6x^3 - 9x^2 + 30x + 14) \div (x + 3)$

20) $(x^3 - 12x^2 + 17x + 34) \div (x - 10)$

21) $(6v^3 - 26v^2 - 25v + 17) \div (v - 5)$

22) $(x^3 - 7x^2 - 17x + 9) \div (x + 2)$