Secondary Math 2/2H Name_____

1.4 Factoring Difference of Squares

Date_____ Period____

Factor each completely.

1) $4x^2 - y^2$

2) $9m^2 - 25n^2$

3) $x^2 - 9y^2$

4) $u^2 - 16v^2$

5) $25x^2 - y^2$

6) $9u^2 - v^2$

7) $4x^2 - 25y^2$

8) $u^2 - v^2$

9) $18x^2 - 32$

10) $50a^2 - 2$

11) $16x^2 - 100$

12) $12x^2 - 75$

13) $7x^3 + 33x^2 - 10x$

14) $12x^3 - 92x^2 - 32x$

15) $5r^3 + 4r^2 - 9r$

16) $42a^3 + 174a^2 - 180a$

Answer the following.

17) What does the value *a* do to a function that is transformed?

18) What does the value *k* do when a function is transformed?

19) What does the value *h* do when a function is transformed?

20) What does the negative in front do when a function is transformed

How did the function transform?

21) $y = \frac{1}{2}(x - 2)^2 - 4$

22) $y = -|x + 1| - 5$

23) $y = 2\sqrt{x - 3} - 4$