

Factoring the Difference of Squares

Factor each completely.

$$1) \ 9x^2 - 1$$

$$2) \ 4n^2 - 49$$

$$3) \ 36k^2 - 1$$

$$4) \ p^2 - 36$$

$$5) \ 2x^2 - 18$$

$$6) \ 196n^2 - 144$$

$$7) \ 180m^2 - 5$$

$$8) \ 294r^2 - 150$$

$$9) \ 150k^2 - 216$$

$$10) \ 20a^2 - 45$$

$$\begin{array}{l} 1) \ (3x + 1)(3x - 1) \\ 5) \ 2(x + 3)(x - 3) \\ 9) \ 6(5k + 6)(5k - 6) \end{array}$$

$$\begin{array}{l} 2) \ (2n + 7)(2n - 7) \\ 6) \ 4(7n + 6)(7n - 6) \\ 10) \ 5(2a + 3)(2a - 3) \end{array}$$

$$\begin{array}{l} 3) \ (6k + 1)(6k - 1) \\ 7) \ 5(6m + 1)(6m - 1) \\ 11) \ 3(n + 5)(n - 5) \end{array}$$

$$\begin{array}{l} 4) \ (p + 6)(p - 6) \\ 8) \ 6(7r + 5)(7r - 5) \end{array}$$