

NAME: _____

1. fall0706ia, P.I. A.A.19

The expression $x^2 - 16$ is equivalent to

[A] $(x - 2)(x + 8)$ [B] $(x + 8)(x - 8)$

[C] $(x + 2)(x - 8)$ [D] $(x + 4)(x - 4)$

2. 080902ia, P.I. A.A.19

Which expression is equivalent to $9x^2 - 16$?

[A] $(3x - 4)(3x - 4)$ [B] $(3x + 4)(3x - 4)$

[C] $(3x + 8)(3x - 8)$ [D] $(3x - 8)(3x - 8)$

3. 010909ia, P.I. A.A.19

The expression $9x^2 - 100$ is equivalent to

[A] $(3x - 100)(3x - 1)$ [B] $(9x - 10)(x + 10)$

[C] $(9x - 100)(x + 1)$

[D] $(3x - 10)(3x + 10)$

4. 060804ia, P.I. A.A.19

Factored, the expression $16x^2 - 25y^2$ is equivalent to

[A] $(4x - 5y)(4x + 5y)$

[B] $(4x - 5y)(4x - 5y)$

[C] $(8x - 5y)(8x + 5y)$

[D] $(8x - 5y)(8x - 5y)$

5. 060932ia, P.I. A.A.19

Factor completely: $4x^3 - 36x$

[1] D _____

[2] B _____

[3] D _____

[4] A _____

[2] $4x(x - 3)(x + 3)$, and appropriate work is shown.

[1] Appropriate work is shown, but one computational or factoring error is made.

or [1] Appropriate work is shown, but one conceptual error is made, such as leaving the answer as $4x(x^2 - 9)$.

or [1] $4x(x - 3)(x + 3)$, but no work is shown.

[0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously

[5] incorrect procedure. _____