

Multiplication of Polynomials
02/29/2012

Student Name: _____

Class: _____

Date: _____

Instructions: Read each question carefully and select the correct answer.

1. Review Melinda's work.

Melinda
 $(p - 8)(p^2 - 14p + 35)$
1. $(p - 8)(p^2 - 14p + 35)$
2. $p^3 - 14p^2 + 35p - 8p^2 + 112p - 280$
3. $p^3 + 13p^2 + 112p - 280$

Choose the option that identifies Melinda's error.

- A. She combined "unlike" terms in step 2.
- B. She multiplied terms in the wrong order in step 1.
- C. She multiplied odd integers incorrectly in step 1.
- D. She didn't reduce her answer to its lowest terms in step 3.

2. Jerome is trying to work through this algebra problem for the third time. Choose the option that identifies where Jerome is making his error.

Jerome
1. $(6n - 4)^2$
2. $(6n - 4)(6n - 4)$
3. $36n^2 - 24n - 24n - 16$
4. $36n^2 - 48n - 16$

- A. He multiplied terms in the wrong order in step 2.
- B. He didn't square the terms before combining them in step 2.
- C. He didn't reduce his answer to its lowest terms in step 4.
- D. He multiplied negative integers incorrectly in step 2.

3. Multiply the polynomials.

$$(p^3 + 2p^2 - 3)(4p^2 - 5p + 7)$$

- A. $4p^6 + 3p^4 - 3p^3 + 2p^2 + 15p - 21$
- B. $4p^5 - 10p^3 - 21$
- C. $4p^5 + 3p^4 - 3p^3 + 2p^2 + 15p - 21$
- D. $p^3 + 6p^2 - 5p + 4$

4. Multiply and simplify.

$$(2x^2 + x - 18)(9x + 2)$$

- A. $18x^3 + 13x^2 - 164x + 36$
- B. $18x^3 + 13x^2 - 25x - 20$
- C. $18x^3 + 13x^2 - 160x - 36$
- D. $18x^3 + 13x^2 - 29x + 20$