10-4 Factors of Polynomials

Name: _____   Time› Start: _____   Finish: _____   Total Time = _____

Give the binomial that will make the statement true.
If it is not possible, write "Not Possible." Put your answer in the blank.

_____ 1. $(3x + 2)\ ($ _____ $) = 6x^2 + 7x + 2$

_____ 2. $(2x + 3)\ ($ _____ $) = 4x^2 + 8x + 3$

_____ 3. $(5x - 1)\ ($ _____ $) = 10x^2 + 9x - 3$

_____ 4. $(3x - 2)\ ($ _____ $) = 3x^2 + 28x - 20$

_____ 5. $(5x + 2)\ ($ _____ $) = 5x^2 + 3x - 2$

_____ 6. $(x - 4)\ ($ _____ $) = 2x^2 - 5x - 12$

_____ 7. $(3x + 2)\ ($ _____ $) = 15x^2 + 7x - 2$

_____ 8. Which is a factor of $2x^2 + 11x + 15$?
    A. $(x + 5)$ B. $(2x + 5)$ C. $(2x + 3)$

_____ 9. Which is a factor of $2x^2 - 3x - 2$?
    A. $(x + 2)$ B. $(2x - 1)$ C. $(x - 2)$

_____ 10. Which is a factor of $3x^2 + 17x + 10$?
    A. $(x + 5)$ B. $(3x + 5)$ C. $(x + 10)$

_____ 11. Which is a factor of $8x^2 + 14x + 3$?
    A. $(4x + 3)$ B. $(4x + 1)$ C. $(2x + 1)$

_____ 12. Which is a factor of $6x^2 - 7x + 2$?
    A. $(3x + 2)$ B. $(3x - 2)$ C. $(2x + 1)$

_____ 13. Which is a factor of $10x^2 - 17x + 3$?
    A. $(2x - 3)$ B. $(5x + 3)$ C. $(5x + 1)$