Math III Name_____ ID: 1

Multiplying Polynomials

Date_____ Period____

Find each product.

1) $(2x - 5)(3x + 1)$

2) $(2x - 5)(x + 5)$

3) $(x + 5)(5x + 2)$

4) $(3k - 5)(4k + 3)$

5) $(2b + 4)(4b - 3)$

6) $(4r + 1)(r - 3)$

7) $(3x - 5)(4x^2 - 2x - 1)$

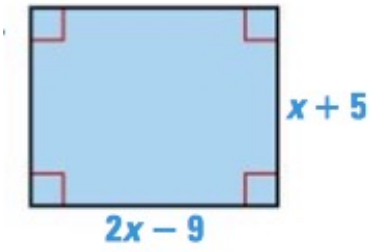
8) $(x + 2)(4x^2 + 4x - 1)$

9) $(5x + 5)(3x^2 + 5x + 2)$

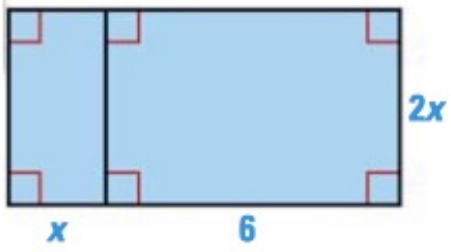
10) $(2r - 5)(4r^2 - 2r + 2)$

Find the AREA of the shaded region below (for 11-16)

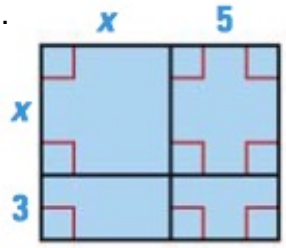
11.



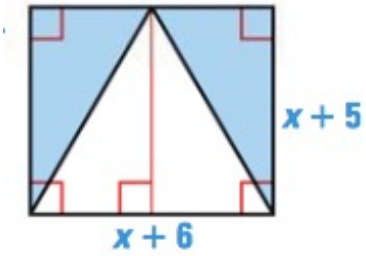
12.



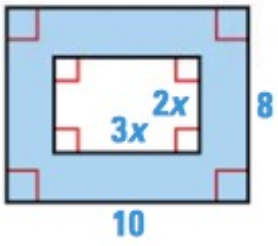
13.



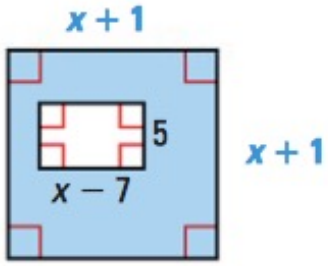
14.



15.



16.



17. **SWIMMING POOL** A rectangular swiming pool is bordered on one side by a deck. A contractor is hired to build a walkway along the remaining three sides of the pool. The width of the walkway is the same on every side, as shown.

a. Write a polynomial that represents the total area of the pool and the walkway.

b. Find the combined area of the pool and the walkway when the width of the walkway is 5 feet.