**b)** $(4b + 3)(2b^2 + 4b + 3)$

$= 4b(\_\_\_\_\_) + 3(\_\_\_\_\_)$

$= 4b(\_\_\_\_) + 4b(\_\_\_\_) + 4b(\_\_\_\_) + 3(\_\_\_\_) + 3(\_\_\_\_) + 3(\_\_\_\_)$

$= \_\_\_\_b^3 + \_\_\_\_b^2 + \_\_\_\_b + \_\_\_\_b^2 + \_\_\_\_b + \_\_\_\_$

$= \_\_\_\_b^3 + \_\_\_\_b^2 + \_\_\_\_b^2 + \_\_\_\_b + \_\_\_\_b + \_\_\_\_$

$= \_\_\_\_\_$

**2.** Expand, then simplify. Verify for parts a and b.

**a)** $(2n)(-2n^2 + 4n - 5) = 2n(\_\_\_\_) + 2n(\_\_\_\_) + 2n(\_\_\_\_)$

$= \_\_\_\_\_$

Verify. Substitute $n = 2$.

Left side

$(2n)(-2n^2 + 4n - 5)$

$= \_\_\_\_\_$

$= \_\_\_\_\_$

$= \_\_\_\_\_$

$= \_\_\_\_$

Right side

$\_\_\_\_\_$

$= \_\_\_\_\_$

$= \_\_\_\_\_$

$= \_\_\_\_$

The numbers match, so the product is likely correct.

**b)** $(4b - 5)(b^2 - 7b + 8)$

$= 4b(\_\_\_\_\_) - 5(\_\_\_\_\_)$

$= 4b(\_\_\_\_) + 4b(\_\_\_\_) + 4b(\_\_\_\_) - 5(\_\_\_\_) - 5(\_\_\_\_) - 5(\_\_\_\_)$

$= \_\_\_\_b^3 - \_\_\_\_b^2 + \_\_\_\_b - \_\_\_\_b^2 + \_\_\_\_b - \_\_\_\_$

$= \_\_\_\_ - \_\_\_\_ - \_\_\_\_ + \_\_\_\_ + \_\_\_\_ - \_\_\_\_$

$= \_\_\_\_\_$

Verify. Substitute $b = 2$.

Left side

$(4b - 5)(b^2 - 7b + 8)$

$= \_\_\_\_\_$

$= \_\_\_\_\_$

$= \_\_\_\_\_$

$= \_\_\_\_$

Right side

$\_\_\_\_\_$

$= \_\_\_\_\_$

$= \_\_\_\_\_$

$= \_\_\_\_$

The numbers match, so the product is likely correct.

**c)** $(-4y + 3)(4y^2 + 3y - 7)$

$= \_\_\_\_\_$

 