

Algebra Test B Key

$$1.) (m+2)(m+1)$$
$$m^2 + 1m + -2m + -2$$
$$m^2 + -m + -2$$

$$2.) (x+4)(x+4)$$
$$x^2 + -4x + -4x + 16$$
$$x^2 + -8x + 16$$

$$3.) (y+3)(x^2+m^3+xm)$$
$$yx^2 + m^3y + yxm + 3x^2 + 3m^3 + 3xm$$

$$4.) (2m+3)^2$$
$$(2m+3)(2m+3)$$
$$4m^2 + 6m + 6m + 9$$
$$4m^2 + 12m + 9$$

$$5.) (m+n)(m+n)$$
$$m^2 + mn + nm + n^2$$
$$m^2 + 2mn + n^2$$

I multiplied the entire length by the entire width.

$$(m \cdot m) + (n \cdot m) + (n \cdot m) + (n \cdot n)$$
$$m^2 + nm + nm + n^2$$
$$m^2 + 2nm + n^2$$

I multiplied the length and width of all four sections and then added everything together.