2.1 Найти производную:

$$(\sin(2x+1))' = \sin'(2x+1)(2x+1)' = \sin'(2x+1)((2x)'+(1)') =$$

$$= \cos(2x+1)(2+0) = \cos(2x+1)\cdot 2 =$$

$$= 2\cos(2x+1)$$

Ответ:

$$\boxed{(\sin(2x+1))' = 2\cos(2x+1)}$$

2.2 Найти производную:

$$(\sin(x^2+2x+1))' = \sin'(x^2+2x+1)(x^2+2x+1)' = \sin'(x^2+2x+1)((x^2)'+(2x)'+(1)') =$$

$$= \cos(x^2+2x+1)(2x+2+0) = \cos(x^2+2x+1)(2x+2) =$$

$$= 2(x+1)\cos(x^2+2x+1)$$

$$(\sin(x^2+2x+1))' = (\sin(x+1)^2)' = \sin'(x+1)^2((x+1)^2)' =$$

$$= \cos(x+1)^2\, 2(x+1)(x+1)' = \cos(x+1)^2\, 2(x+1)((x)'+(1)') =$$

$$= \cos(x+1)^2\, 2(x+1)\cdot 1 = \cos(x+1)^2\, 2(x+1) =$$

$$= 2(x+1)\cos(x+1)^2$$

Ответ:

$$\boxed{(\sin(x^2+2x+1))' = 2(x+1)\cos(x^2+2x+1)}$$