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The zero-divisor graph of a commutative ring with one ( say  $R$ ) is a graph whose vertices are the nonzero zero-divisors of this ring, with two distinct vertices are adjacent in case their product is zero. This graph is denoted by  $\Gamma(R)$ .

We study the zero-divisor graph  $\Gamma(\mathbb{Z}_{p^n}(\alpha))$  where  $p$  is a prime number,  $\mathbb{Z}_{p^n}$  is the set of integers modulo  $p^n$ , and  $\mathbb{Z}_{p^n}(\alpha) = \{a + bx : a, b \in \mathbb{Z}_{p^n} \text{ and } x^2 = 0\}$ . We find the clique number of  $\Gamma(\mathbb{Z}_{p^n}(\alpha))$  and the complete subgraphs of  $\Gamma(\mathbb{Z}_{p^n}(\alpha))$  that achieve this clique number. (Received September 11, 2008)