Math 270 - Basic Discrete Mathematics Practice Quiz on Section 8.3

Directions: Answer the problem given below.

1. Define the relation R on the set $A = \{-4, -3, -2, -1, 0, 1, 2, 3, 4\}$ as follows:

For all $x, y \in A$, $xRy \Leftrightarrow 3|(x^2 - y^2)$.

This relation R is an equivalence relation: find its distinct equivalence classes.