1. In this problem, $a$, $b$ and $d$ are positive integers. Each of the following statements is true for some choices of $a$, $b$ and $d$. However, only one of them is also not true for some choices of $a$, $b$ and $d$. Which one is it?

   (a) If $d \mid a$ and $d \mid b$, then $d \mid (a + b)$.
   (b) If $d \mid a$ and $d \nmid b$, then $d \nmid (a + b)$.
   (c) If $d \nmid a$ and $d \nmid b$, then $d \nmid (a + b)$.
   (d) If $d \mid a$ and $d \mid b$, then $d \mid (a - b)$.

2. The ten digit number $N = 7777777772$ has nine 7’s in it and is clearly divisible by both 1 and 2. What is the total number of positive integers $\leq 10$ that divide $N$?

   (a) 2  (b) 3  (c) 4  (d) 5