DIVISIBILITY TEST - 2nd COURSE OF ESO

1) Determine if the following statements are true or false, and why.
    a) 13640 is a multiple of 5, 10 and 11
    b) 7 is a divisor of 63
    c) 9 is a divisor of 42
    d) 17 is a multiple of 51

2) Work out all the divisors of the numbers 24 and 52

3) Factor out the numbers 2000, 2187 and 15925

4) Work out
    a) lcm (15, 40) =
    b) lcm (16, 64) =
    c) hcf (100, 250) =
    d) hcf (98, 45) =

5) ¿De cuántas formas puedo repartir 40 pares de zapatos en cajas iguales de forma que no sobre ninguno?

6) A NGO wants to deliver goods amongst families with problems due to the crisis. They have 600 bricks of milk, 200 bottles of olive oil and 350 kgs of cereal. How many boxes can they make so they have as many goods as possible and they are all identical? What's the composition of each box?

7) I take a bus that stops at the bus stop every eight minutes, while my cousin takes another bus that stops every twelve minutes at the same place. If we both took the bus this morning at eight o'clock, what's the next time the buses will coincide?