0.2a Homework: Divisibility Rules

Directions: Use divisibility rules to determine whether each number is divisible by 2, 3, 4, 5, 6, 9, or 10. Justify your response.

1. 6,480	2. 135	3. 24,640
4. 549	5. 10,523	6. 58,762

7. Circle all the numbers that are factors of 6,420.

<div align="center">

2   3   4   5   6   9   10

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For problems 8-10 find a number that matches each description

8. A 3-digit number that is divisible by 2, 3, and 6. How do you know?	9. A 3-digit number that is divisibly by 3 and 4. How do you know?
10. A 4-digit number that is divisibly by 5 and 9 but not divisibly by 10. How do you know?	11. A 4-digit number that is not divisible by 2, 3, 5, or 10.

12. Determine whether each statement is true or false. Justify your answer.
    a. If a number is divisibly by 9 it is divisible by 3.

    b. If a number is divisibly by 3 is it divisible by 9.

13. Emily delivers newspapers on Sunday mornings. Each Sunday she must deliver 112 newspapers, she likes to organize them into stacks of equal numbers and deliver one stack at a time. What size of stacks can she make?

14. You are the senior member of a team of 9 realtors in an agricultural real estate agency. When a sale is executed all partners receive equal shares, and if there is a remainder, the remainder goes to you as senior partner. In the month of October last year, the following sales were made:
    12,017 acres 77,760 acres 11,010 acres 40,500 acres.
    How many more acres did you get over the rest of the sales team?