


(Show your Work)

 Theo has been cutting grass for people in his neighbourhood. If he cuts the grass from Monday to Friday he makes \$13 per lawn. If he cuts grass on Saturday he makes \$15 per lawn. If he cuts grass on Sunday he makes \$17 per lawn.

If Theo cuts two lawns on Tuesday, three on Wednesday, four on Saturday, and one on Sunday, how much Money will he have earned?

Penny cuts hair at the hair salon. She earns \$5 for children's hair cuts, \$12 for adult cuts, and \$8 for senior's cuts. On Tuesday she cut five children's hair, ten adult's hair and nine senior's hair. How much did she earn on Tuesday?

A plane is loaded with 2342 kg of packages that all have the same weight. Are the weights of the packages 1 kg, 2 kg, 5 kg, or 10 kg. Explain your answer.

Explain why you think a rule for divisibility by 1 is not needed.

Write all the possibilities for the missing digit.

- a. 145_ is divisible by 10, 5, and 2
- b. 453_ is divisible by 2, but not 5, or 10.
- c. 786_ has a remainder of 3 when divided by 5.
- d. 962_ is divisible by 5, but not by 10 or 2.

Each number below is divisible by 9. Identify all the possibilities for the missing digit.

a. 652_ _____ _____ _____

b. _540 _____ _____ _____

c. 30_6 _____ _____ _____

d. 3_27 _____ _____ _____

2727 cans of soup have been lined up in 9 rows. Is it possible for each row to have an equal number of trees? Explain.

4562 litres of water are poured into 3 litre containers. Will there be any water left over? Explain.

What is the least/smallest number that is greater than 2513 and divisible by 3. Explain your answer.

A four digit number is divisible by 10, 3, and 5. It's second digit is 7. It's third digit is an odd number. List 3 potential four digit numbers that it could be.

Can a number be divisible by 9 and not 3. Explain your answer?

Give an example of a number that is divisible by 3 but not 9.