Worksheet

07/30/2020

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Problem quickname: 8903

<u>1)</u>

Quick:
8903

Why is this statement true? Specify the appropriate divisibility rule.

- a) 18632 is not divisible by 125. Reason: The number 632 formed by the last three digits is not divisible by 125, nor is it a zero.

- b) 8145 is divisible by nine. Reason: The digit sum 18 is divisible by nine.

- c) 86890 is not divisible by 20. Reason: Although the last digit is a zero, the second last digit 9 is not even.

- d) 3476 is not divisible by ten. Reason: The last digit of the number is not a zero.

- e) 30774 is not divisible by ten. Reason: The last digit of the number is not a zero.

- f) 28771 is not divisible by ten. Reason: The last digit of the number is not a zero.

- g) 86119 is not divisible by ten. Reason: The last digit of the number is not a zero.

- h) 1412 is not divisible by 25. Reason: The number 12 formed by the last two digits is not divisible by 25 and it is not a zero.

- i) 82873 is not divisible by 100. Reason: The last two digits of the number are not 00.

- j) 1772 is not divisible by 25. Reason: The number 72 formed by the last two digits is not divisible by 25 and it is not a zero.

<u>2)</u>

Quick:
8903

Is that statement true? Specify the appropriate divisibility rule.

- a) 6157 is divisible by nine. False, because the digit sum 19 is not divisible by nine.

- b) 99063 is divisible by 50. False, because the number 63 formed by the last two digits is neither a zero nor 50.

- c) 8657 is divisible by nine. False, because the digit sum 26 is not divisible by nine.

- d) 82984 is divisible by 50. False, because the number 84 formed by the last two digits is neither a zero nor 50.

- e) 23432 is divisible by 20. False. The last digit is not a zero. The penultimate digit 3 ist ungerade.

f) 1806 is divisible by 25. False, because the number 6 formed by the last two digits is not divisible by 25 and it is not a zero.

g) 29461 is divisible by 50. False, because the number 61 formed by the last two digits is neither a zero nor 50.

h) 36075 is divisible by 20. False. The last digit is not a zero. The penultimate digit 7 ist ungerade.

i) 7314 is divisible by three. True, because the digit sum 15 is divisible by three.

j) 173 is divisible by two. False, because the last digit 3 is odd.

3)

Is that statement true? Specify the appropriate divisibility rule.

a) 51 is divisible by two. False, because the last digit 1 is odd.

b) 31519 is divisible by 20. False. The last digit is not a zero. The penultimate digit 1 ist ungerade.

c) 1135 is divisible by 25. False, because the number 35 formed by the last two digits is not divisible by 25 and it is not a zero.

d) 73 is divisible by two. False, because the last digit 3 is odd.

e) 125 is divisible by two. False, because the last digit 5 is odd.

f) 806 is divisible by 25. False, because the number 6 formed by the last two digits is not divisible by 25 and it is not a zero.

g) 147 is divisible by five. False, because the last digit 7 is neither a zero nor a five.

h) 1419 is divisible by 20. False. The last digit is not a zero. The penultimate digit 1 ist ungerade.

i) 2157 is divisible by three. True, because the digit sum 15 is divisible by three.

j) 450 is divisible by 25. True, because the number 50 formed by the last two digits is divisible by 25.

4)

Why is this statement true? Specify the appropriate divisibility rule.

a) 825 is divisible by 25. Reason: The number 25 formed by the last two digits is divisible by 25.

b) 9762 is divisible by three. Reason: The digit sum 24 is divisible by three.

c) 91425 is not divisible by 40. Reason: The last digit is not a zero. The number 42 formed by the penultimate and third-last digit is not divisible by four.

d) 15035 is not divisible by 125. Reason: The number 35 formed by the last three digits is not divisible by 125, nor is it a zero.

e) 184 is divisible by two. Reason: The last digit 4 is even.

f) 50780 is not divisible by 40. Reason: While the last digit is a zero, the number 78 formed by the penultimate and third-last digit is not divisible by four.

g) 47333 is not divisible by 100. Reason: The last two digits of the number are not 00.

h) 19628 is not divisible by 125. Reason: The number 628 formed by the last three digits is not divisible by 125, nor is it a zero.

i) 93829 is not divisible by 40. Reason: The last digit is not a zero. The number 82 formed by the penultimate and third-last digit is not divisible by four.

j) 8547 is divisible by three. Reason: The digit sum 24 is divisible by three.

Good Luck!