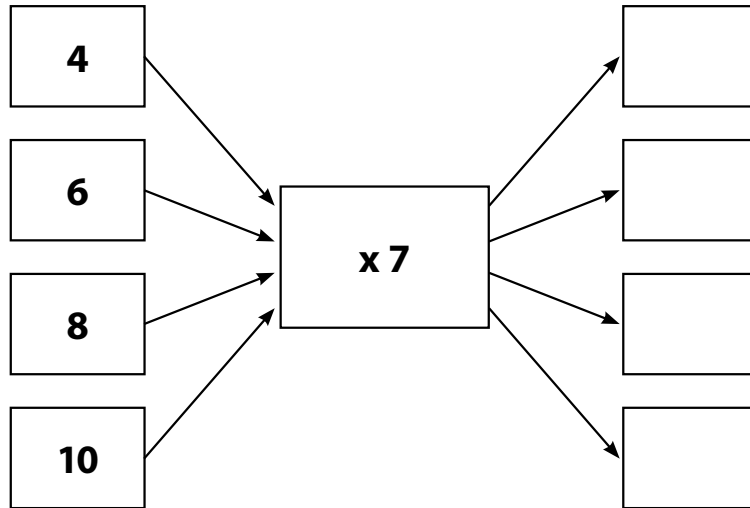


Input - output

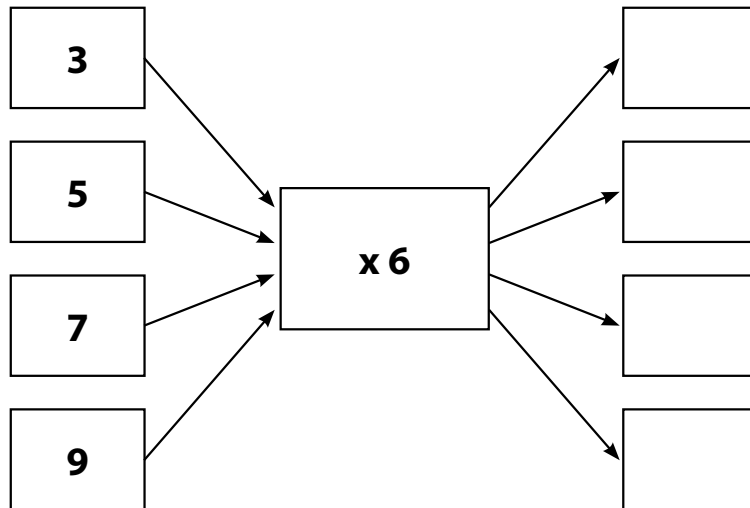
Name: _____

Complete the following diagrams:

1.



2.



Questions:

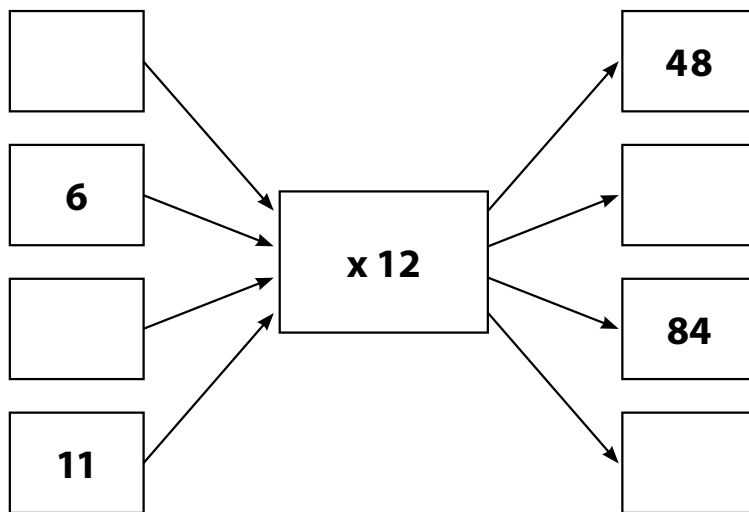
a. What do you notice about the numbers on the right of the diagram?
Do they follow a pattern?

b. Normally we read the diagrams from left to right, but can we read them from right to left? What must we change when we read from right to left?

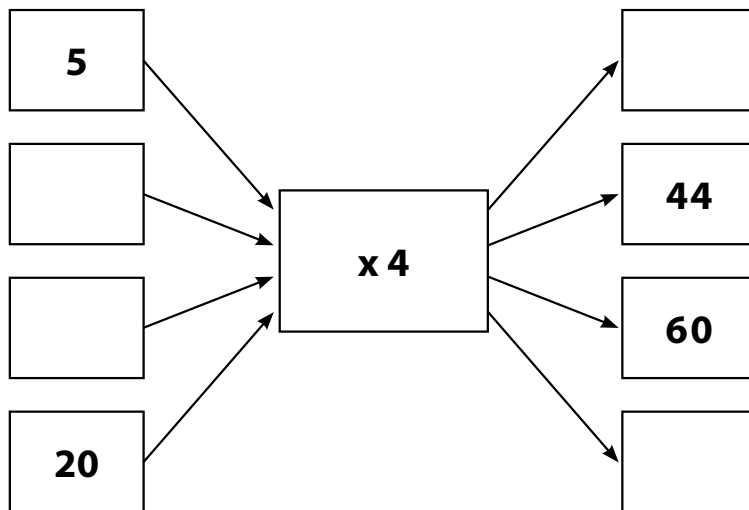
Input - output

Now complete the following diagrams:

3.



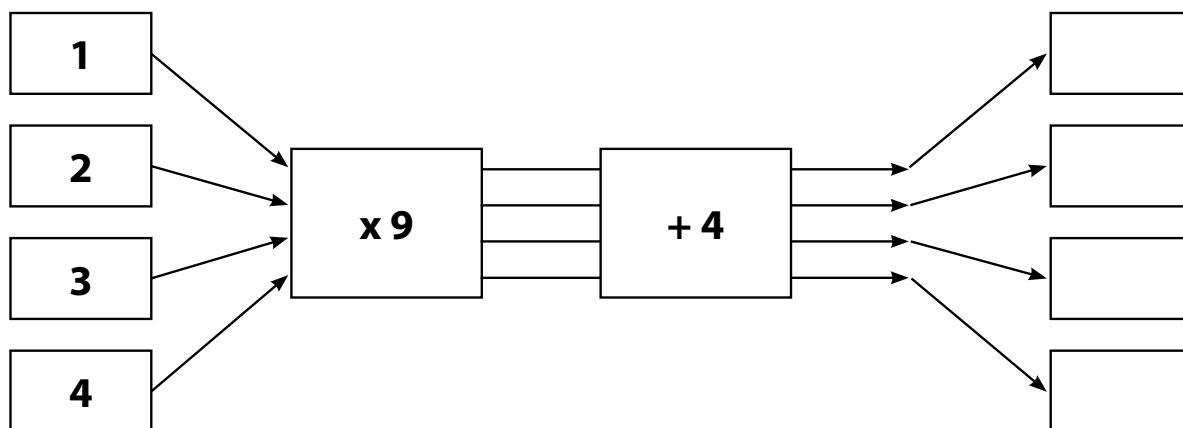
4.



Question:

How did you work out your answers on the left?

Complete the next spider diagram:



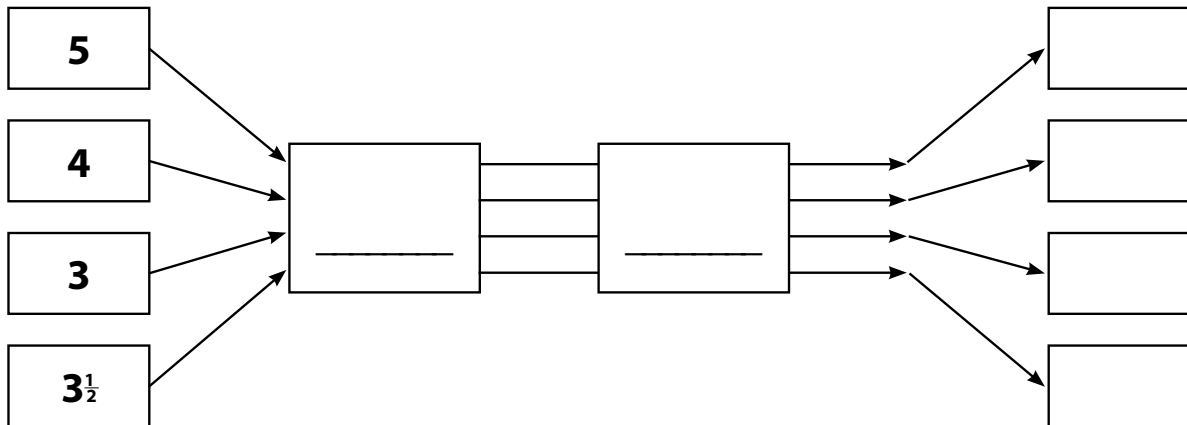
Input - output

Based on what you have done in this worksheet so far, answer the word problems below:

1. Daniel gets R50.00 pocket money per week from his parents. This year, he will get an extra R20.00 per month. Use the spider diagram to work out how much Daniel will get each month.

Number of weeks in the month:

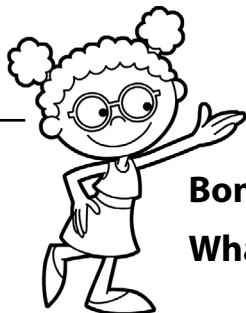
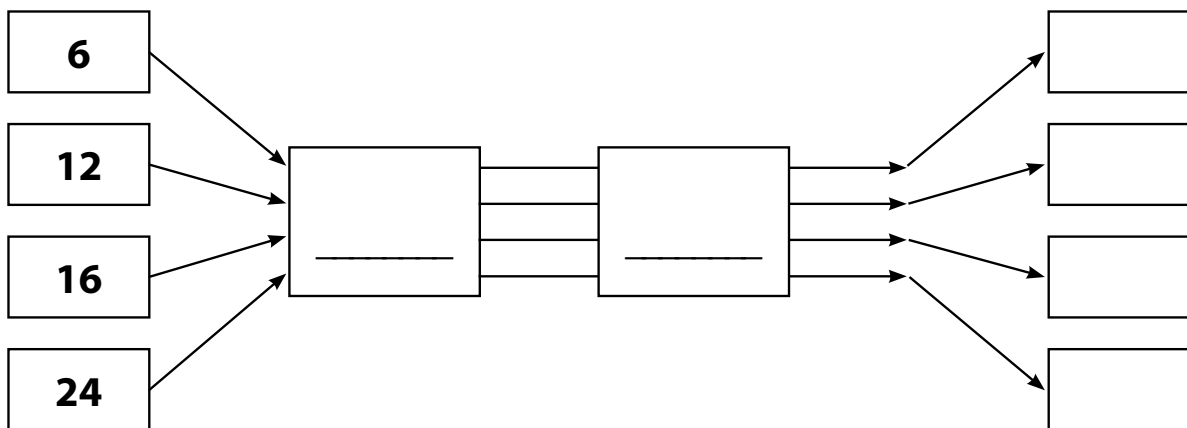
Total pocket money:



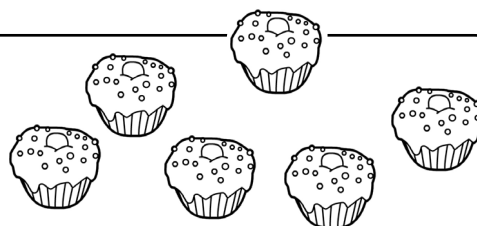
2. Jamie likes to bake cupcakes and always doubles the recipe. Every time she makes a doubled batch, she always has one cupcake more than she should. Use the diagram to work out how many cupcakes she will end up with:

Yield of the Cupcake recipe:

Total number of cupcakes



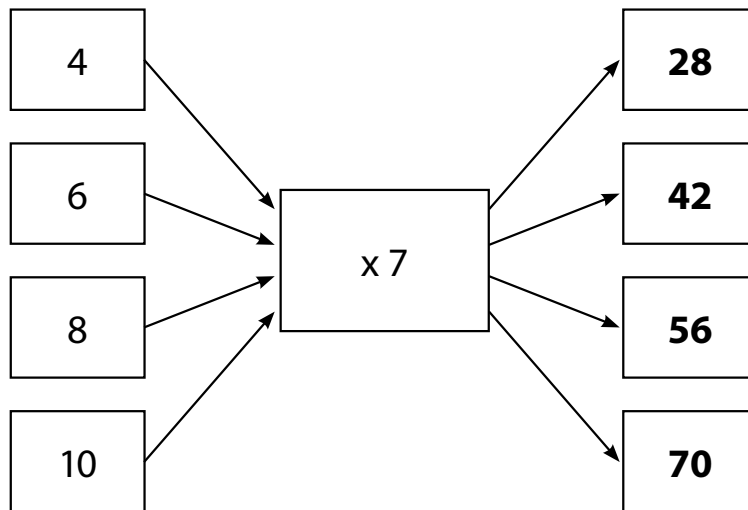
Bonus Question:
What is a baker's dozen?



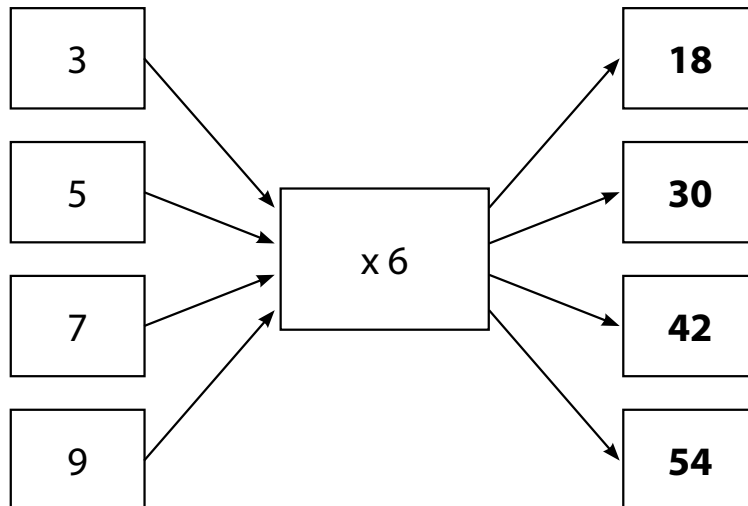
Answer sheet

Complete the following diagrams:

1.



2.



Questions:

- a. What do you notice about the numbers on the right of the diagram?
Do they follow a pattern? (3)

Yes, they do follow a pattern. The numbers all increase by 14 in diagram 1, and 12 in diagram 2, which is equal to 7×2 and 6×2 . The difference between the numbers on the left of the diagram increases in units of 2.

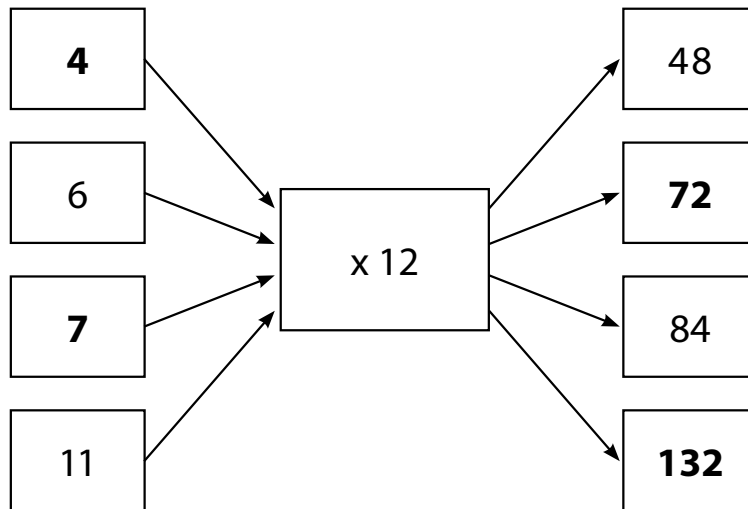
- b. Normally we read the diagrams from left to right, but can we read them from right to left? What must we change when we read from right to left? (2)

Yes, the diagrams can be read from right to left, but then we must divide instead of multiply, e.g. $18 \div 6 = 3$.

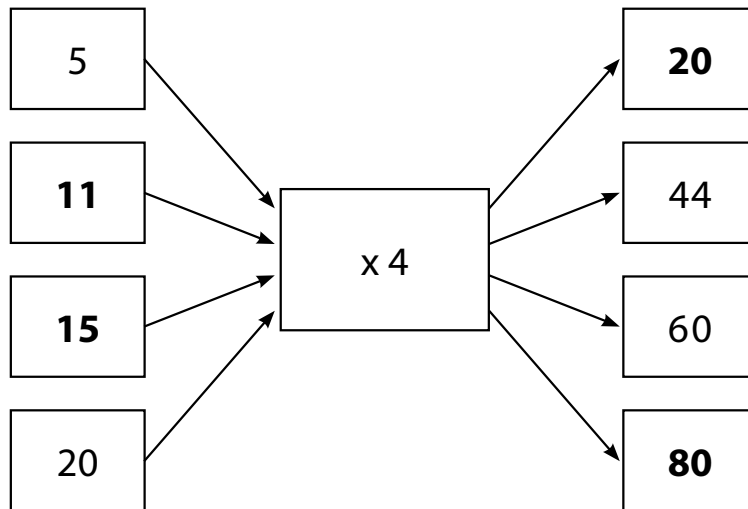
Answer sheet

Now complete the following diagrams:

3. (4)



4. (4)



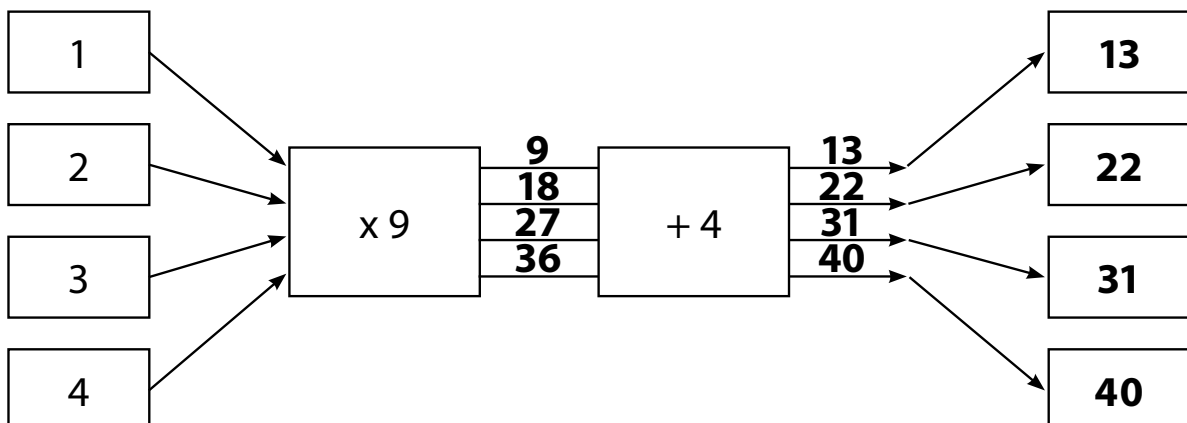
Question:

How did you work out your answers on the left?

(1)

Work backwards by dividing the answer by either 12 or 4 respectively.

Complete the next spider diagram and fill in the steps to take:



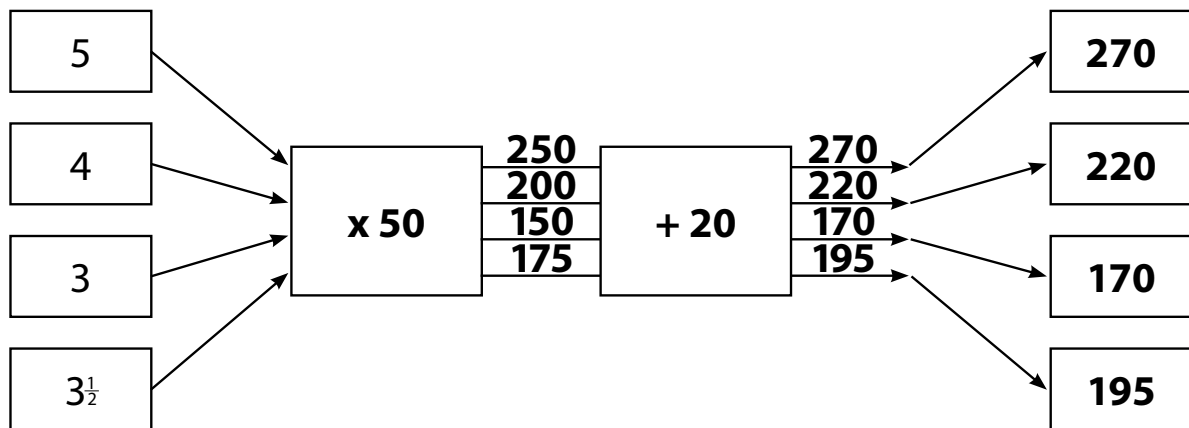
Answer sheet

Based on what you have done in this worksheet so far, answer the word problems below:

- Daniel gets R50.00 pocket money per week from his parents for. This year, his grandparents will give Daniel an extra R20.00 per month. Use the spider diagram to work out how much Daniel gets each month?

Number of weeks in the month:

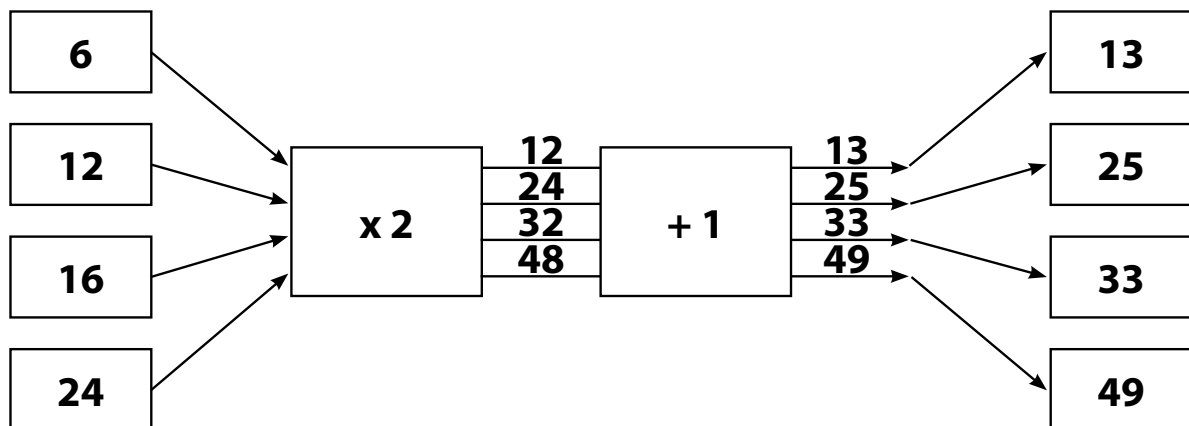
Total pocket money:



- Jamie likes to bake cupcakes, and always doubles the recipe. Every time she makes a doubled batch, she always has one cupcake more than she should. Use the diagram to work out how many cupcakes she will end up with:

Yield of the Cupcake recipe:

Total number of cupcakes



Bonus Question:

What is a baker's dozen?

A baker's dozen is 13 instead of a dozen which is 12.

