## Number patterns with MOPe than one Ruhe

We can make flow diagrams that have more than one rule or step.
Complete these flow diagrams with their rules. Supply the missing input and output values.


1. What do you notice about the rules for the flow diagrams?
2. What do you notice about the answers for each of the flow diagrams?
3. What does this tell you about multiplication?

4. What do you notice about the rules for the flow diagrams?
5. What do you notice about the answers for each of the flow diagrams?
6. What does this tell us about multiplication?

7. What do you notice about the rules for the flow diagrams?
8. What do you notice about the answers for each of the flow diagrams?
9. How do these answers compare to the answers in the first sets of flow diagrams?
10. What does this tell us about multiplication?
11. When can we use this rule?

## Answers

We can make flow diagrams that have more than one rule or step.
Complete these flow diagrams with their rules. Supply the missing input and output values.

12. What do you notice about the rules for the flow diagrams?

They are the same rules, but in different order.
13. What do you notice about the answers for each of the flow diagrams?

The answers for the inputs are the same.
14. What does this tell you about multiplication?

When we multiply, the order doesn't matter.

15. What do you notice about the rules for the flow diagrams?

They are the same rules, but in different order.
16. What do you notice about the answers for each of the flow diagrams?

The answers for the inputs are the same.
17. What does this tell us about multiplication?

When we multiply, the order doesn't matter.

18. What do you notice about the rules for the flow diagrams?

They are the same rules, but in different order.
19. What do you notice about the answers for each of the flow diagrams?

The answers for the inputs are the same.
20. How do these answers compare to the answers in the first sets of flow diagrams?

The answers for the inputs are the same.
21. What does this tell us about multiplication?

We can break down big numbers into smaller parts to make it easier to add.
22. When can we use this rule?

When we are multiplying by bigger numbers, we can multiply more easily by breaking down the numbers and multiplying in steps.

