## Patterns

1. Fill in the missing numbers in each sequence below
a. $2,6,10,=, 18,-$
b. $27,24,21,-$
c. $5,10,20,-, 80,-$
d. 243, 81, 27, _ , 3,

1a. Draw the next pattern


1 circle
3 arrows


2 circles 6 arrows
b. Make a rule connecting circles (c) and arrows (a)

$$
a=
$$

3. 


a. Complete the table

| No of crosses (C) | 1 | 2 | 3 | 4 | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| No. of lines (I) | 12 | 23 | 34 |  |  |

b. Make a rule connecting crosses (c) and number of lines (I) $1=$
c. If I have 25 crosses in the pattern, how many lines would there be?

