

Mathematics

Delprov E

Årskurs

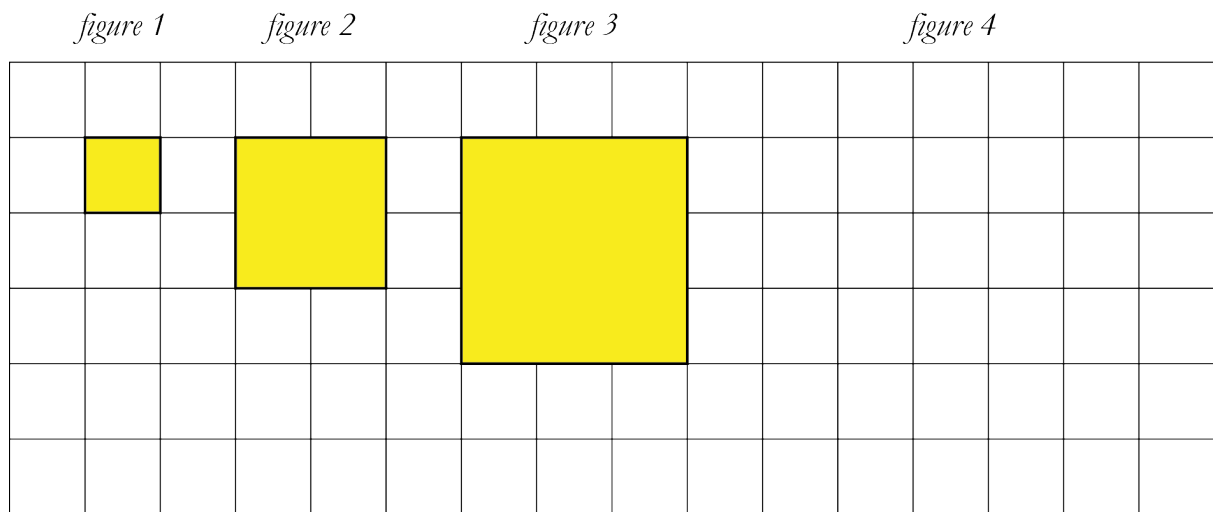
6

Elevens namn och klass/grupp

Task 37. Patterns with squares

(4/5/5)

Pattern I



- a) Draw *figure 4* in the pattern.
- b) What is the area of *figures 2, 3 and 4*? Fill in the table.

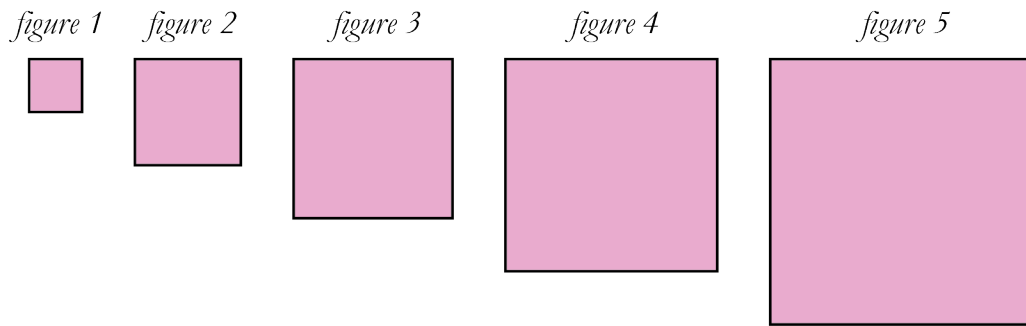
| | | | | |
|---|---|---|---|---|
| The figure's number | 1 | 2 | 3 | 4 |
| The size of the area (cm ²) | 1 | | | |

- c) Determine two areas in the pattern.
 What is the area of *figure 7*?
 What is the area of *figure 13*?
Show your workings.

- c) You only know the number of the figure. How can you use this to determine the area of a figure in the pattern? Explain in words or use a formula.

- e) What is the number of the figure with an area of 400 cm²?
Show your workings.

Pattern II



| | | | | | |
|---------------------------------------|---|----|----|----|---|
| The figure's number | 1 | 2 | 3 | 4 | 5 |
| Size of the area in area units (a.u.) | | 16 | 36 | 64 | |
| Side length in length units (l.u.) | | | | | |

- a) Fill in the table.
- b) Explain how you determined the size of the area in *figure 1* and *figure 5*.
- c) What is the number of the figure with an area of 256 a.u.?
Show your workings.

