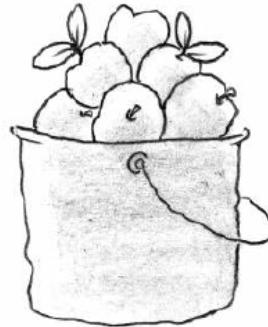


Circles

Finding and continuing complex patterns in problem solving activities

Problem 85 Numbers 123

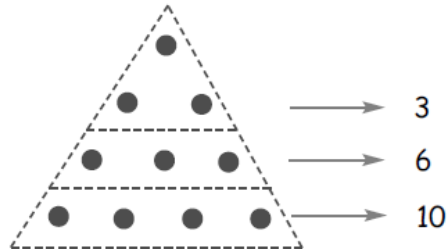
During the holidays, Karen picked apples at the Granny Smith Orchard. She was paid 10p for the first bucket of apples, 20p for the second, 40p for the third and 80p for the fourth. How much was she paid for the eighth bucket?



Level
A

Problem 86 Shape & Space

This is a picture of some triangular numbers. Can you see the pattern? What will the next triangular number be? What will the sixth one be?

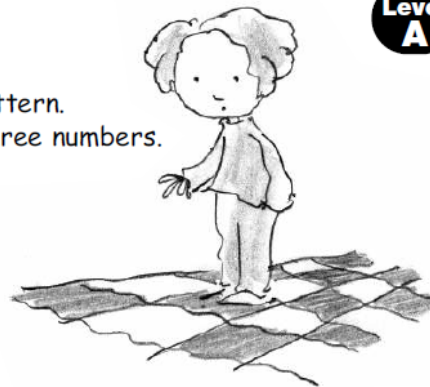


Level
A

Problem 87 Numbers 123

Each of these groups of numbers follow a pattern. Find the pattern, and write down the next three numbers.

- (a) 2 6 10 14 — — —
- (b) 11 22 33 44 — — —
- (c) 1 3 7 13 21 — — —
- (d) 64 32 16 8 — — —
- (e) 6 9 8 11 10 13 — — —



Level
A

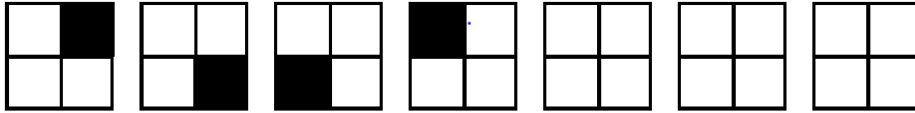
Circles

Problem 90

Shape & Space

Level
A

Look for a pattern in this row of squares.
Shade in the last three squares to finish the pattern.

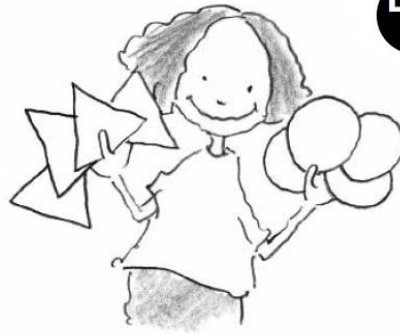


Problem 88

Numbers 123

Level
A

Sally is doing a maths assignment. She wants the title page to feature a border using different shapes. She has four orange triangles and four yellow circles. Show two different ways she could set up the border, and for each explain the repeating pattern.



Extension

Pick four shapes and create your own pattern. Draw them out carefully and colour them in if you can.