

Four in a Line Rules

VERSION A: WHOLE CLASS

Play with the class grouped in teams in some way.

Project an OHP copy of the board onto a whiteboard, and cross off the captured rectangles or mark them with a small cube.

Each team in turn chooses two numbers/expressions from the resource set and carries out an operation to combine them. If the answer is on the board they capture that rectangle.

They score 1 point if the rectangle is not joined to any other rectangles already captured (by anyone). Otherwise they score a number of points equal to the number of rectangles in the block of captured rectangles of which the new rectangle forms part.

There is a further bonus point for anyone completing a line of four rectangles vertically, horizontally, or diagonally.

VERSION B: GROUPS

As above, but play on a photocopy so that the sheet can be moved about without losing the position.

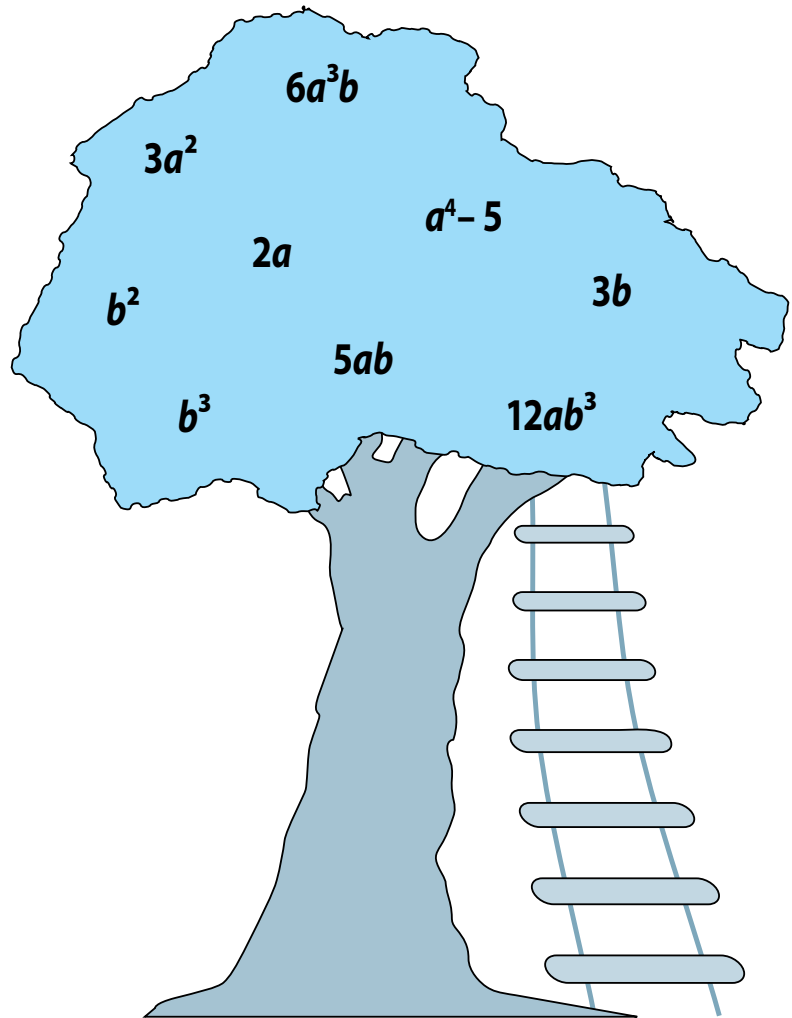
VERSION C: PAIRS

Play like noughts and crosses on a photocopy of the board. The winner is the player who first gets four in a line.

VERSION D: PUZZLE - GROUP OR INDIVIDUAL

Determine whether all the rectangles on the board can be captured. Explain how each answer can be obtained. Some versions deliberately have one rectangle which cannot be captured!

Multiplication and Division Four in a Line



Specific Instructions

Work on a copy of the board below.

Choose two of the formulae on the tree and either multiply or divide them. If the answer is on the board and not already claimed, you win that rectangle.

$2a^3$	$3b^3$	$5ab^3$	a^3b^3	$6b^3$
$6ab$	$72a^4b^4$	$12a^4b^3$	$2ab$	$2a^4$
$10a^2b$	$12a$	b	$2ab^2$	$3a^5$
$15ab^2$	$9a^2b$	$5a^4b$	$6b$	$10a^2$
$24a^2b^3$	$60a^2b^4$	$15ab^2$	$30a^4b^3$	$3a^2b$