Topic List for the Yr 8 SKI Assessment June 2025 Inderstand and represent ratio and use ratio notation Is equivalent ratio to solve problems Is equivalent ratio and divide into a given ratio Is equivalent ratio including 1:n Inderstand and use Pi as a ratio between diameter and circumference Is solve problems involving direct proportion Is explore conversion graphs Is explore relationships between similar shapes and scale factors Is draw and explore scale diagrams Is explore the gradient of a line including negative gradients Is plot graphs in the form y = mx + c Is explore non linear graphs Is find the midpoint of a line segment Is eand understand y = mx + c	Sparx Code M885 M801 M801, M525 M543 M169 M478, M472 M771 M324 M112 M618, M320 M797 M544, M205 M932 M771			
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	M544, M888			<u></u>
write probabilities as fractions, decimals or percentages	M938			
find probabilities from sample space diagrams and two way tables	M718			
interpret and create Venn diagrams	M419			
use the product rule for finding the total possible outcomes	M332			
find probabilities from Venn diagrams	M829			
form algebraic expressions	M795, M531			
o solve 2 step equations	M634, M647			
multiply out a single bracket, and to factorise to a single bracket	M237, M100			
expand a pair of binomials, and factorise	M950, M908			
o solve equations, including with brackets	M902			
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simplify algebraic expressions by multiplying indices	M120			<u> </u>
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use index rules with negative indices		_		
use index rules with negative indices convert between fractions decimals and percentages	M264			
use index rules with negative indices convert between fractions decimals and percentages find fractions and percentage of amounts				
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use index rules with negative indices convert between fractions decimals and percentages find fractions and percentage of amounts	M264 M476			
o use index rules with negative indices o convert between fractions decimals and percentages o find fractions and percentage of amounts o calculate the percentage increase and decrease with multipliers	M264 M476 M905			
	understand inequalities including on a number line understand and solve simple inequalities solve equations and inequalities with unknowns on both sides form and solve equations convert between mixed and improper fractions add and subtract fractions with any denominator add and subtract mixed and improper fractions multiply fractions by integers find the product of any pair of fractions divide any pair of fractions understand and use reciprocal multiply and divide improper and mixed fractions (H) calculate area of triangles, rectangles and parallelograms calculate area of a trapezium calculate area of circles find the circumference of circles find area of sectors find arc length calculate area and perimeter of compound shapes use roots and powers simplify algebraic expressions by multiplying indices	understand inequalities including on a number lineM384understand and solve simple inequalitiesM118solve equations and inequalities with unknowns on both sidesM554, M732form and solve equationsM957convert between mixed and improper fractionsM601add and subtract fractions with any denominatorM835add and subtract mixed and improper fractionsM931multiply fractions by integersM157find the product of any pair of fractionsM110understand and use reciprocalM216multiply and divide improper and mixed fractions (H)M197, M265calculate area of triangles, rectangles and parallelogramsM390, M635calculate area of a trapeziumM705calculate area of sectorsM231find the circumference of circlesM169find area of sectorsM430find are lengthM280calculate area and perimeter of compound shapesM996, M303use roots and powersM135simplify algebraic expressions by multiplying indicesM120simplify algebraic expressions by dividing indicesM120	understand inequalities including on a number line understand and solve simple inequalities solve equations and inequalities with unknowns on both sides form and solve equations form and solve equations convert between mixed and improper fractions add and subtract fractions with any denominator add and subtract mixed and improper fractions multiply fractions by integers find the product of any pair of fractions divide any pair of fractions understand and use reciprocal multiply and divide improper and mixed fractions (H) calculate area of triangles, rectangles and parallelograms multiply and divide improper and mixed fractions (H) calculate area of a trapezium find the circumference of circles find area of sectors find area of sectors M430 find are length M280 simplify algebraic expressions by multiplying indices M120 M120	understand inequalities including on a number line understand and solve simple inequalities solve equations and inequalities with unknowns on both sides form and solve equations convert between mixed and improper fractions add and subtract fractions with any denominator add and subtract mixed and improper fractions multiply fractions by integers find the product of any pair of fractions divide any pair of fractions multiply and divide improper and mixed fractions (H) multiply and divide improper and mixed fractions (H) calculate area of triangles, rectangles and parallelograms find the circumference of circles find area of sectors Mass Mass