



# Initial or Alternative Teacher License Evaluation Worksheet

Demonstration of Professional Competencies & Depth of Content Knowledge

Mathematics (Grades 6-12)

## Applicant

Legal name:

Date:

## Requirements

Endorsement content knowledge must be demonstrated by at least one of the following measures for each content area (see below). Please note, if you select the Portfolio option to demonstrate a content knowledge category, it is your responsibility to ensure that evidence provided aligns with the Colorado Department of Education's teacher preparation standards. For more information about educator preparation standards, please see [this webpage](#). To learn more about content covered on Praxis exams, please visit [this webpage](#).

### Mathematics

- Praxis 5161: Official score report required (152 or higher) -or- Praxis 5165 exam: Official score report required (159 or higher)
- Coursework: Minimum of B- (list in grid below); syllabi and official transcript required
- Portfolio: Evidence demonstrating attainment of standards outlined below required

In the grid below, list the evidence by which you are demonstrating content knowledge. It is essential that thorough and complete information is provided for each row inclusive of listing all courses and evidence being utilized. Praxis subscores may be one piece of evidence for a section of content and also must be accompanied by additional evidence such as coursework.

| MATHEMATICS   | Praxis Test Code/Name and Score:  |                                    |
|---|-----------------------------------|------------------------------------|
| Categories for which you must demonstrate content knowledge<br><br>Candidates must possess knowledge of concepts, including:  | Course #(s)/Title(s) and Grade(s) | Portfolio Description and Evidence |
| Number & Quantity and Algebra <ul style="list-style-type: none"> <li>• Number sense, properties, and operations</li> <li>• Algebra</li> <li>• Radical and rational exponents</li> <li>• Reason quantitatively</li> <li>• Measurement</li> <li>• Varied Techniques</li> <li>• Example courses include the following: number theory, discrete mathematics, graph theory, linear algebra, modern/abstract algebra, numerical analysis, complex analysis</li> </ul> |                                   |                                    |



|   |  |  |
|---|--|--|
| <p>Functions and Calculus</p> <ul style="list-style-type: none"> <li>• Functions and function notation</li> <li>• Linear, quadratic, and exponential models</li> <li>• Derivatives</li> <li>• Compute limits</li> <li>• Differentiation and integration techniques</li> <li>• Example courses include the following: mathematical modeling, functions and modeling, calculus I, calculus II, calculus III, multivariable calculus, differential equations, and real analysis</li> </ul> |  |  |
| <p>Geometry</p> <ul style="list-style-type: none"> <li>• Shape, dimension, and geometric relationships</li> <li>• Geometric theorems</li> <li>• Trigonometry</li> <li>• Example courses include the following: modern geometry (non-Euclidean geometry), Euclidean geometry, geometric transformations</li> </ul>   |  |  |
| <p>Statistics &amp; Probability</p> <ul style="list-style-type: none"> <li>• Make inferences and justify conclusions</li> <li>• Data analysis on a single variables and two variables</li> <li>• Compute probabilities</li> <li>• Example courses include the following: introduction to statistics, probability and statistics, statistics for engineering and science</li> </ul>  |  |  |
| <p>History</p> <ul style="list-style-type: none"> <li>• Perspectives, philosophy, and history</li> <li>• Example courses include the following: history of mathematics, philosophy of mathematics, perspectives on mathematics and mathematics education</li> </ul>   |  |  |

Submission of this worksheet must be accompanied by all evidence listed in the grid above. You must receive approval prior to submitting an application for an initial teacher license.