

# CORE CERTIFICATION EXAM PREP GUIDE

Everything you need to know to prepare for and pass the exam.

# START YOUR ANALYTICS SUPERHERO JOURNEY HERE



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The world is full of dirty data and complex problems. Luckily, there are analytic superheroes like you who harness their Alteryx powers for good. Whether you're brand-new or a seasoned veteran, the Alteryx Certification program provides you with ways to continue learning and a place to prove your Alteryx analytic skills. The Core Certification is where the learning journey begins.

Unlike traditional certification programs that are focused on only measuring your knowledge, our program is designed to help you assess your strengths and weaknesses, close the gaps with meaningful learning, and apply what you've learned so you can use your superpowers to solve the impossible.

## THE PATH TO CERTIFICATION SUCCESS

Prepare and Study Prepare for the exam by reading this guide and taking the <u>Core</u> <u>Certification Prep Training</u>. Once you know what's on the exam, complete the self-assessment to identify your strengths and weaknesses. Use the Core Curriculum to study for the exam and sharpen your skills. Take the practice exam at the end of this guide.

Take the Exam

From the <u>Certification page</u> you can take the exam on-demand. The exam isn't just a test, it's also part of the learning journey. Our certifications are designed to be low-pressure so you can focus on learning, not just passing. If you don't pass on your first attempt, identify areas of difficulty and study up before taking the exam again.



Passing the exam isn't the end - it's just the beginning. Continue your certification journey by becoming Advanced certified, share your knowledge with others on the Alteryx Community, or join a User Group.



#### **EXAM FORMAT**

The Core exam is designed to help you prove and *improve* your skills: it's free, online, on-demand, and open-book.

The Alteryx Designer Core certification exam is intended to test your aptitude around the tools in Designer that are used most often and are fundamental in data preparation and analysis. The "core" toolset is the foundation for analysis in Alteryx Designer.

Audience: Everyone!

Experience level: Beginner to Intermediate

Price: Free

Exam type: Online, on-demand

Time Allotted: 2 hours

Passing Score: 80%

References: Open Book

Prerequisites: none

Questions: 80

Question Types: 73 multiple choice questions, 7 practical application

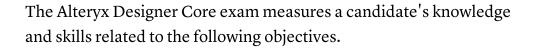
questions

Point Values: 1 pt for multiple choice, 3 points for practical application. Partial credit is awarded and deducted for multiple-response questions ("Select all that apply").

Attempts: 1 attempt every 7 days

Version: The exam tests on the latest version of Designer.

#### **EXAM OUTLINE**



The candidate should be able to demonstrate their ability to do the following with all tools covered on the exam:

- Identify the functionality, strengths, and limitations of the tool
- Identify when the tool would be used to create a given output
- Configure the tool to create a given output
- Differentiate the functionality of similar tools

#### In /Out

- Tools: Browse, Input Data, Output Data, Text Input
- Identify how to efficiently connect to multiple data sources and write out multiple files
- Describe how Data Profiling provides insight into a data set

#### Join

- Tools: Append Fields, Find Replace, Join, Union
- Determine which tool will most efficiently blend a given set of data
- Identify the join tools that have an embedded Select
- Identify common errors that may occur when joining data

#### Preparation

- Tools: Data Cleansing, Filter, Formula, Sample, Select, Select Records, Sort, Unique
- Identify the expression that would transform a given input into a given output
- Determine valid string and numeric formulas and expressions
- Differentiate ascending and descending sorting order









































#### Transform

- Tools: Count Records, Cross Tab, Summarize, Transpose
- Determine valid Summarize functions
- Differentiate how Summarize and Count Records process values
- Differentiate how Cross Tab and Transpose transform data

#### Parse

- Tools: DateTime, Text to Columns
- Match delimiters to their descriptions
- Determine the output when given an input data set and a configured Text to Columns or DateTime tool

#### General

- Tools: Comment, Tool Container
- Recognize common UI elements and workflow settings, including: workflow dependencies, workflow constants, workflow optimization, keyboard shortcuts, and Alteryx file types.
- Determine the appropriate data type for a field and differentiate data types.
- Identify how to add documentation and annotations to workflows.

#### **Practical Application**

- Questions in the practical application section gauge your ability to use the above tools to solve questions.
- All questions in this category are worth 3 points.
- Practical application questions require you to connect to a provided data set in Alteryx Designer to solve the problem.



#### **SELF-ASSESSMENT**

Use this sheet to assess your strengths and weaknesses and visualize your progress in your learning journey. Each 'tick box' is worth one point. Use the chart on the following page to plot your knowledge. For example, if you are competent in the "Browse" tool, select the first two boxes and award yourself 2 points.



Tool Difficulty: 1/10

Novice ☐ Competent Proficient



Text Input Tool Difficulty: 2/10

☐ Novice ☐ Competent Proficient



Input Data Tool Difficulty: 5/10

☐ Novice ☐ Competent Proficient



Tool Difficulty: 5/10 ☐ Novice

☐ Competent Proficient



Tool Difficulty: 2/10 ☐ Novice

☐ Competent Proficient



Select Records Tool Difficulty: 2/10

☐ Novice ☐ Competent Proficient

Formula Tool Difficulty: 7/10

☐ Novice ☐ Competent Proficient



Filter

Tool Difficulty: 5/10 ☐ Novice





Sample

Tool Difficulty: 3/10 ☐ Novice

☐ Competent Proficient



Unique

Tool Difficulty: 3/10 □ Novice

☐ Competent

Proficient



Sort

Tool Difficulty: 1/10 □ Novice

☐ Competent Proficient



**Data Cleansing** 

- Tool Difficulty: 1/10 □ Novice
- ☐ Competent
- Proficient



Text to Columns

- Tool Difficulty: 4/10 Novice
- ☐ Competent
- Proficient



DateTime

Tool Difficulty: 4/10 Novice ☐ Competent

Proficient

Union

Tool Difficulty: 3/10

☐ Novice ☐ Competent

Proficient



Tool Difficulty: 2/10

Proficient

Novice

☐ Competent

Append Fields Tool Difficulty: 5/10

☐ Novice

☐ Competent

Proficient



Find Replace

- Tool Difficulty: 5/10
- Novice ☐ Competent





Transpose

- Tool Difficulty: 7/10 Novice
- ☐ Competent Proficient



Cross Tab

Tool Difficulty: 7/10 □ Novice

☐ Competent Proficient



**Count Records** 

Tool Difficulty: 2/10

☐ Novice ☐ Competent Proficient



Summarize

Tool Difficulty: 6/10 Novice

☐ Competent Proficient



**Tool Container** 

- Tool Difficulty: 1/10 ☐ Novice
- ☐ Competent Proficient



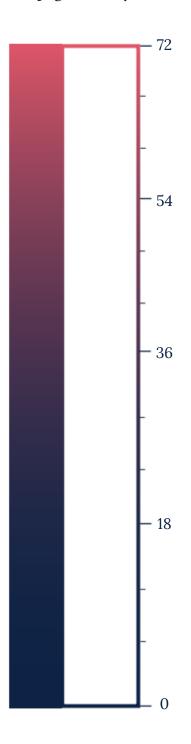
Comment

- Tool Difficulty: 2/10
- □Novice
- ☐ Competent Proficient



When assessing your skill level with each tool, remember that you'll need to be able to do the following on the exam: 1) Identify the functionality, strengths, and limitations of the tool 2) Identify when the tool would be used to create a given output 3) Configure the tool to create a given output 4) Differentiate the functionality of similar tools

From the previous page, fill the thermometer with your score (1 point for every box) to display your level of tool knowledge. Use your score and the certification preparedness key to gauge your readiness for the exam. If your score is less than 60, use the Core Curriculum on the next page to study for the exam and sharpen your skills.



#### Certification Preparedness Key:

1-18: Just Getting Started 19-36: Core Recruit

36-50: Core Apprentice 51-60: Core Sidekick

61-72: Core Superhero

#### CURRICULUM



The Alteryx Academy provides several modalities for learning, including interactive lessons, live training, and weekly challenges.

Use the results from your self-assessment to guide your study efforts. If you're a beginner, complete the curriculum sequentially to learn the knowledge and skills needed to become Core Certified. Make sure you're logged into the <u>Alteryx Community</u> to access all training.

#### Connect to, View, and Write Data **Interactive Lessons:** □ Connecting to Files Connecting to Multiple Sheets at Once Adding Data to Your Workflow □ Writing Data □ Viewing Your Data Documents: □ Browse Tool The Ultimate Input Data Flowchart Blend Data **Interactive Lessons:** □ Blending Data with Joins ☐ Blending Data with Unions □ VLookUps with Designer Documents: Append Fields □ Join Tool Format and Cleanse Data Interactive Lesson: Formatting Column Names and Layout

#### Sort and Sample Data

□ Data Cleansing

Interactive Lesson:

Document:

- □ Sorting Data
- ☐ Sampling Data



Filter Data
Interactive Lessons:
☐ Removing Rows from Your Data
☐ Removing Duplicate Values
Pivot and Summarize Data
Interactive Lessons:
☐ Creating Pivots and Totals
Documents:
□ Summarize Tool
☐ Summary Processes
□ Count Records
Parse Data
Interactive Lesson:
Separating Data into Columns and Rows
Document:
□ <u>DateTime Tool</u>
Formulas & Expressions
Interactive Lessons:
□ <u>Diving into Expressions</u>
Conditional Statements
☐ Preparing Data with String Functions
Using Numeric Functions
☐ Functions
Documents:
☐ Adding Comments to Expressions
User Interface & Workflow Configuration
Interactive Lesson:
☐ <u>Understanding Data Types</u>
Documents:
☐ Workflows and Constants
☐ <u>Shortcuts</u> and <u>File Types</u>



#### **Practical Application**

#### Weekly Challenges:

- ☐ Data Blending for Batch Output
- □ Preparing Delimited Data
- □ Data Preparation Using Pivot Tables
- ☐ <u>Data Cleansing Practice</u>

#### **Exam Preparation**

#### **Training Videos:**

- ☐ Core Certification Prep Part 1
- ☐ Core Certification Prep Part 2
- ☐ Core Certification Prep Part 3
- ☐ Core Certification Prep Part 4

#### **Additional Resources**

Read about each tool's functionality and configuration in the <u>Help Documentation</u> and <u>Tool Mastery</u> series. See each tool in action in Designer with One Tool Examples: go to the Help Menu > Sample Workflows > Learn One Tool at a Time. Quiz your tool knowledge with Alteryx Tool Flashcards.



## PRACTICE

## EXAM

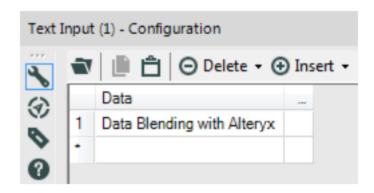
Get a feel for the questions on the exam and test out your analytic superpowers.

#### QUESTION #1

Consider the following workflow (assume no leading or trailing spaces):



The Text Input tool is configured as follows:



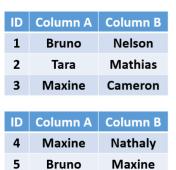
The Formula Tool contains the expression: FindString([Data], "B")

What is the result of the formula? (1 pt)

- A) 5
- B) 4
- C) 6
- D) 7

### QUESTION #2

Which tool would be used to create the following output? (1pt)



Hilary



Α	В	A1	B1
Bruno	Nelson	Bruno	Maxine
Maxine	Cameron	Maxine	Nathaly

A) Formula

Mathias

- B) Union
- C) Join
- D) Append Fields

#### QUESTION

#### #3

Practical Application Question (3 points)

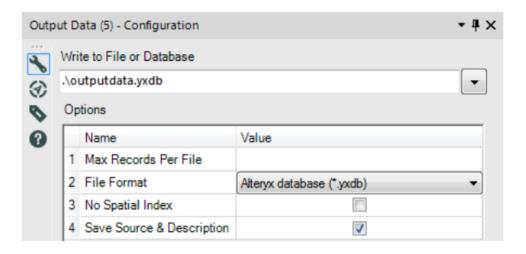
The data set <u>SchoolStore\_Sales</u> contains the monthly sales numbers for different categories of products. What are the total sales for the Education category?

- A. 4856095
- B. 4967908
- C. 10782606
- D. 958603
- E. 1034592

#### QUESTION

#4

Where will the outputdata.yxdb file be saved? (1 pt)



- A) You will receive an error. '.\' is not recognized by the output tool
- B) On the machine's desktop
- C) In the parent folder of the folder where the workflow is saved
- D) In the same folder where the workflow is saved

#### QUESTION #5

Match the file extension with the Alteryx file type: (1 pt)

File Types: File Extensions:

Alteryx Workflow .yxft
Alteryx Analytic App .yxwz
Alteryx Macro .yxdb
Alteryx Field Types .yxmd
Alteryx Database .yxzp
Alteryx Packaged Workflow .yxmc

Note: In the examination, matching will be done with drop-downs in the right-side table.



#### ANSWER KEY

#### Question 1) A.

This question is testing two concepts – 1) formula knowledge and 2) familiarity with zero-based strings expressions. The FindString() function searched for a specified bit of text and returns the beginning position from where the text was found. In this case, we were looking for what position "B" was at in the string "Data Blending with Alteryx". When counting the characters we we see that it is the 6th character in the string. But hold up! Alteryx functions start the count of characters at zero. While you count the "D" as 1, Alteryx starts at o. Knowing this, we realize that "B" is really the 5th character. Therefore, the answer is 5 (A).

#### Question 2) C.

This question tests your ability to differentiate the functionality of 3 tools in the Join palette. You can see in the output that the two data sets have been joined, which allows you to eliminate option A. The Union tool joins data by stacking records, so option B can be eliminated. The Append Fields tool joins records from the source input to every record in the target input. In this case, the output data set would have 9 records, so it's safe to eliminate option D. The Join tool would blend the two input data sets to create the output data by joining on Column A.

#### Question 3) D.

This question is worth 3 points, so you'll want to spend more time on this question than the others. There are many different workflow configurations that can get this answer. Your workflow does not need to match the workflow below.

First, the data is filtered to remove products that are not in the Educational category. Then, the data is transposed to get all of the sales figures in one column. The data type of the sales figures column is made a numeric data type so that calculations can be done. Lastly, the sales figures are summed using a Summarize tool.



Question 4) D.

This question tests knowledge of relative paths. If you are unfamiliar with the concept (you are not alone!), go into the Designer and simulate the situation. After running your workflow, you'll see that the output is placed in the same folder as the workflow!

#### Question 5

File Types and Extensions:
Alteryx Workflow - .yxmd
Alteryx Analytic App - .yxwz
Alteryx Macro - .yxmc
Alteryx Field Types - .yxft
Alteryx Database - .yxdb
Alteryx Packaged Workflow - .yxzp

