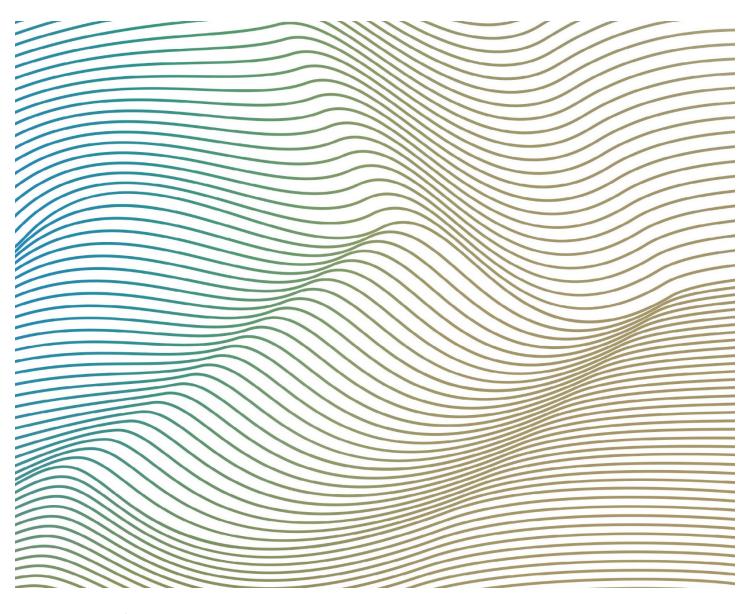
# Alteryx Designer Advanced Certification Exam Prep Guide



© 2021 Alteryx. | 05/21 alteryx.com

# Take Your Superhero Status to the Next Level

The world is full of valuable data that's just waiting to be analyzed. Luckily, there are analytic superheroes like you who harness their Alteryx powers to turn data into insights. With your advanced Alteryx analytics skills, you're able to tackle complex data sets, analyze spatial data, and empower others through reports and analytic applications. You're the superhero the analytics world needs.



#### **Table of Contents**

xam Overview	3
xam Outline	4
teps to Certification Success	8
est Tips	9
xam Prep Resources	10
ractice Exam	11

The Advanced exam is

designed to help you prove

and improve your skills: it's

free, online, on-demand,

and open-book.

## Exam Overview

The Alteryx Designer Advanced Certification exam allows users to demonstrate their higher-level abilities with Alteryx Designer. The exam builds on concepts included in the Core exam and also requires users to understand a wider breadth of tool functionality and apply their knowledge to more complex applications.

**AUDIENCE:** Anyone who is currently Core certified

**EXPERIENCE LEVEL:** Advanced

**PRICE:** Free

**EXAM TYPE:** Online, on-demand

**TIME ALLOTTED:** 2 hours

**VERSION:** The exam tests on the latest version of

Designer

**ATTEMPTS:** 1 attempt every 7 days

**QUESTIONS: 40** 

QUESTION TYPES: 36 multiple choice questions, 4 practical application questions

**PASSING SCORE: 80%** 

**POINT VALUES:** 1 point for multiple choice, 10 points for practical application. Partial credit is awarded and deducted for matching and multiple-response questions ("Select all that apply").

**ALLOWED RESOURCES:** This exam is "open book," and we encourage you to be familiar with resources that are permitted for use during the exam: content on Alteryx Community, Alteryx Help Documentation, information on public websites, and sample workflows and other in-Designer resources.

**PROHIBITED RESOURCES:** You may not receive assistance from another person, allow another person to take the exam on your behalf, plagiarize any exam answers, or use unauthorized publications of exam answers. See the <u>Alteryx Certification Agreement and Policies</u> for more details.

**RECERTIFICATION:** The Alteryx Designer Advanced Certification expires after 2 years. You may retake and pass the Advanced exam OR the Alteryx Designer Expert exam OR any Master exam to renew your Advanced certification.

## Exam Outline

The exam measures a candidate's knowledge and skills related to the objectives below. In addition to the tools highlighted below, the exam also includes tools covered on the Core exam. The Core exam tools will be used for practical application questions and complex expressions or configurations of the tools will appear in multiple choice questions. 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

### **Advanced Preparation**







- Tools: Multi-Field Formula, Multi-Row Formula, Random % Sample
- Correctly format string expressions to produce a given output
- Identify the specifiers and separators that transform a given date
- Create Multi-Row Formula expressions using Row variables
- Determine how to correctly configure the Multi-Row Formula tool for "values for rows that don't exist"
- Identify the results of a compound condition in the Filter tool (condition joined by and/or operators)
- Identify how the Random % Sample tool selects and processes records to output
- Identify the output of complex expressions

#### Advanced Join & Parse





- Tools: Join Multiple, RegEx
- Determine the number of records that result from a multidimensional join
- Identify the regular expression that would transform a given input to a given output
- Differentiate Match and Parse output methods of the RegEx tool
- Identify how the Join Multiple tool processes records that don't match

#### **Spatial Analytics**



















- Tools: Buffer, Create Points, Distance, Find Nearest, Generalize, Poly-Build, Poly-Split, Spatial Info, Spatial Match, Spatial Process, Trade Area
- Identify which tools can generate the centroid of a polygon
- Interpret the results of interactions between Target and Universe objects
- Differentiate the functionality of the T and U input anchors of the Find Nearest tool
- Identify the spatial object that's created from the intersection of two spatial objects
- Identify the output of a Convex Hull build method
- Determine how the Distance tool outputs the distance of a point within a polygon to the nearest edge of the polygon
- Identify the tool that can decrease the number of nodes that make up a polyline or polygon
- Configure the Trade Area tool to create doughnuts
- Identify spatial functionality within the Summarize tool
- Identify spatial functionality within the Formula tool

#### Reporting















- Tools: Interactive Chart, Layout, Overlay, Render, Report Map, Report Text, Table
- Identify the tool that can place reporting snippets on top of one another
- Identify the tools used to produce a given report
- Identify the default outputs of the Report Map tool
- Determine ways the Report Text tool can accept incoming data
- Identify configuration options in the Interactive Chart tool
- Identify configuration options of the Table tool
- Identify the ways the Render tool can write out reporting snippets
- Determine how to achieve batch reporting with the Reporting tools
- Determine how the Layout tool arranges snippets

#### **Macros**







- Tools: Control Parameter, Macro Input, Macro Output
- Determine which kind of macro (standard, iterative, batch) is the best solution for a given scenario
- Identify the number of outputs an iterative macro can produce
- Identify common reasons macros error
- Determine how to debug a macro interface
- Differentiate the functionality of macros versus apps
- Determine how to use an engine iteration number
- Configure a batch macro and an iterative macro

## **Analytic Applications**















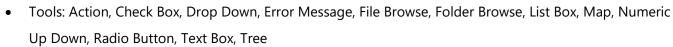












- Configure chained applications
- Identify the Interface tools used to create a given App interface
- Determine when an Action tool is required between Interface and workflow tools
- Identify which Interface tools can be used to input or output data in an App
- Correctly format list values for the Drop Down tool
- Identify ways app users can interact with interface elements from the Map tool
- Identify common reasons why apps error

#### **Data Investigation**











- Tools: Association Analysis, Field Summary, Frequency Table, Pearson Correlation, Scatterplot, Spearman
   Correlation
- Identify the tool that provides remarks and suggestions on data quality
- Interpret the output of the Pearson Correlation tool and identify the variables that have the strongest correlation
- Differentiate the Spearman Correlation and Pearson Correlation tools
- Interpret the output of the Spearman Correlation tool
- Identify the configuration of the Scatterplot tool that produces a given graph
- Determine how to find p-values for correlations

## **Practical Application**

- Questions in the practical application section gauge your ability to use the tools above, along with tools
  from the Core exam, to solve real-life scenario questions. These questions require you to connect to a
  provided data set in Alteryx Designer and build a workflow to arrive at the correct answer.
- The ability to solve problems accurately and efficiently is an important advanced skill that's measured in this section. The time restriction of the exam reflects the importance of efficiency in the workplace. Time is a valuable commodity at work and during the exam.
- The practical application questions account for just over half of the points on the exam.
- The 4 practical application questions appear at the beginning of the exam, but you may complete the questions in any order.

# Steps to Certification Success

#### **LEARN**

- 1. Begin with the <u>Advanced Certification Learning Path</u>. The learning path is organized by topic area and is designed to help you prepare for the exam by collecting some of the most useful learning assets from Community in one place, including interactive lessons, video trainings, and articles.
- 2. Use your new skills to solve at least 10 Weekly Challenges. Each topic area in the Advanced Certification Learning Path provides Weekly Challenge suggestions that will give you hands-on practice with the topic. Approach the challenges with efficiency in mind. If you get stuck, look at how others solved it and learn from their expertise. Examining different solutions may also help you learn how others solved the problem with fewer tools.
- 3. Analyze data that is meaningful to you. Formulate questions and build workflows that give you insight into your own data. This is a critical step in the learning process; not only will you be applying what you've learned but it also allows you to visualize how Designer can help you do your job more efficiently and effectively. For example, take a workflow process that you use on a regular basis and turn it into a macro or add reporting elements to your favorite workflows.

#### **PREPARE**

- 4. Review the exam outline to understand exactly what's on the exam, gauge your current skill level, and identify areas where you need to brush up.
- Watch the <u>Advanced Prep Video Series</u> for a review of the Advanced tool set and to learn what to expect on exam day.
- 6. Take the practice exam at the end of this guide.



#### **TEST**

7. Take the exam. Use your first attempt as a learning opportunity and take advantage of your open book resources to look up what you do not know. Refine your skills over the next 7 days and then retake the exam. Don't worry if it takes you a few tries to pass! Approach the exam as part of the learning journey and use it to help you assess your strengths and weaknesses and keep improving your knowledge and skills.

# Test Tips



## Learn While Testing

The exam is part of the learning process. On your first attempt focus on learning instead of passing. Use your resources to look up answers you don't already know.



#### Read Carefully

Read each question carefully before answering. Pay close attention to tool configurations, screenshots, and data sets. The details matter! Read twice and solve once.



#### **Use Your Resources**

Search for answers using Google, Alteryx Community, and Help Docs. Use One Tool Examples to test out tool configurations. Use the Text Input tool to build out scenarios in Designer.



#### Pace Yourself

Spend about 90 seconds on each 1 point question and 16 minutes on each 10 point practical application question. If you finish early go back and check your answers. Use the full 2 hours.



#### **Answer Every Question**

In the exam platform, use the "Bookmark" feature to flag questions you'd like to come back and review later. Click on "See all questions" to view all unanswered and bookmarked questions.



### Reflect, Review, Refine

After the exam, reflect on the tools and topics that you were unsure about. Review the category results you receive at the end of the exam. Refine your skills and never stop learning.

# Exam Prep Resources

### Advanced Certification Learning Path

The <u>Advanced Certification Learning Path</u> is a topic-based curriculum that will help you broaden your Designer skillset and learn about the tools and concepts covered on the exam. Interactive lessons, articles, videos, and suggested Weekly Challenges allow you to build your knowledge and apply your skills.

## Weekly Challenges

The best way to prepare for the practical application questions is to use your skills to solve real-world problems. There are over 250 Weekly Challenges that can help you do just that! You can use the suggestions in the Advanced Certification Learning Path and use the index to search for challenges on specific topics.

#### Ways to Prepare:







#### **Practice Exam**

Test out your skills with the practice exam at the end of this prep guide.

### **Advanced Prep Video Series**

The <u>Advanced Prep Video Series</u> includes 6 training videos that cover exam tools and concepts and gives you additional details about what to expect on exam day.

- Part 1 Spatial analytics
- Part 2 Building macros
- Part 3 Building apps
- Part 4 Reporting
- Part 5 Advanced prep and parse
- Part 6 What to expect on exam day, the exam platform, and exam tips and strategy

# Practice Exam

### Question 1

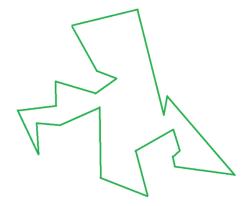
**Practical Application Question** 

You are researching consumption of common food staples globally. In the provided <u>dataset</u>, the average yearly consumption in pounds per person of 15 foods is provided for 236 regions. There are two rows for each region, the header row provides the name of the food and the data row directly beneath it provides the quantity consumed of that food.

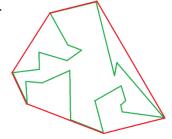
Determine which region consumes the lowest total quantity of **wheat, rice, beans** and **corn** per person. What is that region's total quantity consumed per person for all four items? (Note: data provided are fictitious and randomly generated)

- A) 174 pounds per person
- B) 181 pounds per person
- C) 196 pounds per person
- D) 202 pounds per person
- E) 203 pounds per person

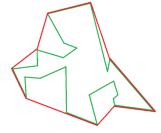
Which of the following red polygons represents the convex hull of the green polygon?



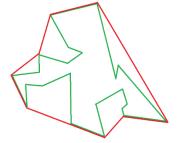
A.



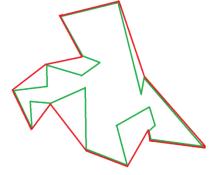
В.



C.



D.



Which regular expression used with the Parse output method of the RegEx tool will achieve the desired result?

Before:

#### **Desired Result:**

Date	Date	Month	Day	Year
January 1, 2016	January 1, 2016	January	1	2016
February 14, 2016	February 14, 2016	February	14	2016
March 22, 2016	March 22, 2016	March	22	2016

A. 
$$(\< \+\)\$$

$$B. (\< \+\>) (\d), (\d+)$$

c. 
$$([A-Z]+)(\d+)(\d+)$$

$$D.(.+)\S(.+)\S(.+)$$

### Question 4

Which of the following can the Render tool output? Select all that apply.

- A. A PowerPoint Presentation
- B. An Alteryx Database file
- C. A picture with a transparent background
- D. Records with a line separating them

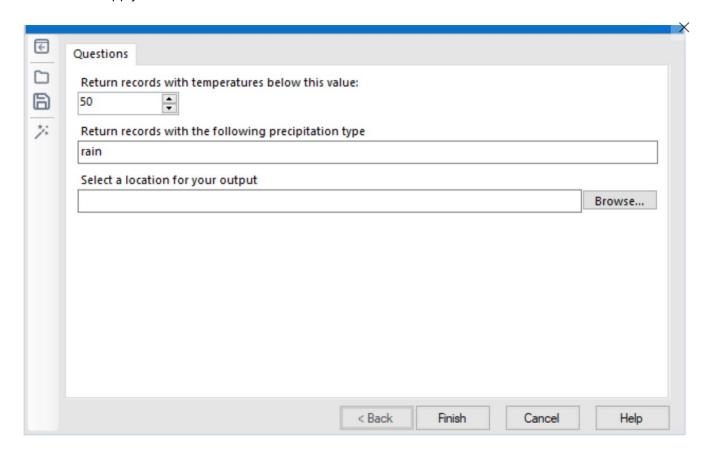
A user is looking at the following output from the Pearson Correlation tool. The user determines that there are weak linear relationships between these variables because the p-values are too high.

Why is this conclusion incorrect?

FieldName	Att	Yds	TD	Lng	
Att	1	0.981051	0.859956	0.717843	•
Yds	0.981051	1	0.870789	0.773585	•
TD	0.859956	0.870789	1	0.631569	•
Lng	0.717843	0.773585	0.631569	1	

- A. High p-values show a strong relationship
- B. The Pearson Correlation tool checks the strength of non-linear relationships
- C. There are too many fields included to make valid conclusions
- D. The output displays correlation coefficients, not p-values

Which of the following interface tools were used to create the Analytic Application interface shown below? Select all that apply.



- A. File Browse
- B. Drop Down
- C. Numeric Up Down
- D. List Box
- E. Folder Browse
- F. Text Box

#### Answer Key:

Question 1 – B Question 2- A Question 3 – A Question 4 – A, C, D Question 5- D Question 6 – C, E, F



## alteryx

## **Alteryx Certification Program**

certification@alteryx.com

Ready to begin preparing for an exam? Check out the <u>certification prep</u> area to access prep guides, practice tests, and learning suggestions.

**Get Certified** 

As a global leader in analytic process automation (APA), Alteryx unifies analytics, data science and business process automation in one, end-to-end platform to accelerate digital transformation. Organizations of all sizes, all over the world, rely on the Alteryx Analytic Process Automation Platform to deliver high-impact business outcomes and the rapid upskilling of their modern workforce.

© 2021 Alteryx. | 05/21 alteryx.com