

# Lesson 1: Introduction to Power BI - Answers

## 1. What is Power BI, and what are its three main components?

Power BI is Microsoft's business intelligence tool for connecting, transforming, and visualizing data. Main components: 1. Power BI Desktop – for creating reports. 2. Power BI Service – for publishing and sharing reports. 3. Power BI Mobile – for accessing reports on mobile devices.

## 2. Name two business use cases for Power BI dashboards.

1. Sales performance monitoring. 2. Customer insights and behavior analysis.

## 3. How do you download and install Power BI Desktop?

Visit <https://powerbi.microsoft.com/desktop>, click 'Download Free', run the installer, and follow prompts.

## 4. Difference between Power BI Desktop and Power BI Service

Desktop: local application to design reports. Service: cloud platform to share and collaborate on reports.

## 5. What file extension does a Power BI project use?

.pbix

## 6. Role of Power Query in Power BI

Power Query is used to clean, transform, and shape data before creating visuals.

## 7. Why would a business prefer Power BI over Excel for reporting?

Interactive dashboards, automated refresh, better handling of large datasets, and cloud sharing.

## 8. One limitation of the free version of Power BI

Cannot privately share reports with others without a Pro license.

## 9. What is a 'published report' in Power BI Service?

A report created in Desktop and uploaded to Power BI Service for online access and interaction.

## 10. How does Power BI Mobile enhance accessibility?

Allows users to view and interact with dashboards anytime, anywhere, with mobile-friendly navigation.

## 11. Power BI vs Tableau – Pros and Cons

Power BI Pros: Affordable, integrates with Microsoft tools, easy for Excel users. Power BI Cons: Limited Mac desktop support, fewer advanced visuals. Tableau Pros: Advanced visuals, strong exploration tools. Tableau Cons: Higher cost, steeper learning curve.

## 12. How Power BI integrates with Azure services

Connects to Azure SQL, uses Azure ML for predictions, integrates with Azure Active Directory.

## 13. What are 'gateways' in Power BI, and when are they needed?

Gateways connect Power BI Service to on-premises data sources for secure refresh and queries.

## 14. ROI Argument – Convincing a company to adopt Power BI

Time savings, real-time insights, cost efficiency, scalability from small to large enterprises.

## 15. Security features of Power BI for sensitive data

Row-Level Security, encryption in transit and at rest, Azure AD integration, and audit logs.