# Bahá'í Star Package Test



High Resolution METAFONT Implementation

# Bahá'í Nine-Pointed Star Package Version 0.2 Test Document

### METAFONT Implementation with Multiple Resolutions

September 16, 2025

### 1 Introduction

This document demonstrates the Bahá'í nine-pointed star package using METAFONT with multiple resolution support. The package provides high-quality rendering at various scales through precompiled bitmap fonts at different resolutions:

- 600 DPI (standard)
- 1200 DPI (2× resolution)
- 2400 DPI (4× resolution)
- 4800 DPI (8× resolution)

### 2 Basic Usage

The star command:  $\mbox{\ensuremath{\mbox{$\sc\sc}$}}$ 

Multiple stars: ☆ ☆ ☆

Unicode input: ❖ (should render identically)

## 3 Size Scaling Tests

### 3.1 Font Size Scaling

Tiny: ❖ Script: ❖

Footnote: \$\footnote: \$\footnote \text{Normal: \$\footnote \text{Varge: \$\footnote \text{Large: \$\footnote \text{Larger: \$

Larger: 森 LARGE: 森 Huge: 森 HUGE: 森

### 3.2 Manual Scaling Tests

2× scale: ₩





#### Large Scale Testing 3.3

 $15 \times$  scale (should use higher resolution font):



 $20 \times$  scale:



# Typography Integration

#### **Text Integration** 4.1

The star works in line with text  $\Rightarrow$  seamlessly.

In bold text  $\Rightarrow$  formatting.

In italic text & styling.

In Small Caps 🔅 Text.

#### 4.2 **Mathematical Context**

In math mode: \* + \* = 2\*

As superscript:  $E = mc^*$ As subscript:  $H_{*}O$ 

### 4.3 List Usage

Using star as bullet points:

- ☆ First spiritual principle
- ☼ Second spiritual principle
- ☼ Third spiritual principle

Numbered list with stars:

- 1. Unity of God ☆
- 2. Unity of Prophets ❖
- 3. Unity of Humanity ❖

### 5 Accessibility Features

The package includes accessibility support through the accsupp package. When text is copied from the PDF, the star symbol ❖ should copy as the proper Unicode character U+1F7D9 (❖).

Test copying this text: "The Bahá'í star 🌣 represents the nine-pointed star."

### 6 Spacing and Positioning

Before  $\ \ \$ after (no spaces)

Before ❖ after (with spaces)
Multiple: ❖❖❖ (consecutive)
Spaced: ❖❖❖ (separated)

### 7 Version Information

• Package: bahai-star v0.2

• Implementation: METAFONT with multiple resolutions

• Unicode support: U+1F7D9 (☆)

• Dependencies: newunicodechar, accsupp

• Compatibility: pdfLaTeX, XeLaTeX, LuaLaTeX



Test completed successfully