

Subject: ATAN with two arguments works like ATAN2
From: Van Snyder
References: J3-026, 03-258r1, section 2.4.4.2, 04-183, 04-397

1 **1 Number**

2 TBD

3 **2 Title**

4 ATAN with two arguments works like ATAN2.

5 **3 Submitted By**

6 J3

7 **4 Status**

8 For consideration.

9 **5 Basic Functionality**

10 Define an alternative ATAN that works like ATAN2.

11 **6 Rationale**

12 ATAN is generic. It is surprising to students that they need to use ATAN2 just because they have the
13 two-argument formulation.

14 **7 Estimated Impact**

15 Minor: One more description for an existing intrinsic function — and we already have the description.
16 Estimated at meeting 169 to be at 3 on the JKR scale.

17 **8 Detailed Specification**

18 Provide a specification for how ATAN works with two arguments, based on how ATAN2 works.

19 **8.1 Suggested edits**

20 The following suggested edits illustrate the magnitude of the project.

21 [Editor: Insert “(one argument)” after the “ATAN” in the first column in the table in 13.6.] 298:16+15

22 [Editor: Insert “or ATAN (Y, X)” at the end of the 13.7.14 subclause title.] 305:36

23 **9 History**

03-258r1, section 2.4.2 m166
04-183 m167
04-397 m170