

The Complete Divide Sequence

Find $S1/S2$: $S1/S2 = S1 * (1/S2)$

1. $S3 = 1/S2$

132 1 S
on
166 ✓

Use the reciprocal approximation instruction to calculate a half precision approximate reciprocal of one of the operands.

2. $S4 = 2 - (S2 * S3)$

126
156

Use the reciprocal iteration instruction to obtain a correction factor which when multiplied by the half precision approximate reciprocal will result in a full precision approximate reciprocal accurate to 46 bits.

3. $S5 = S3 * S4$

Mult.

Use the multiply instruction and multiply the half precision approximate reciprocal by the correction factor to obtain a full precision approximate reciprocal.

4. $S6 = S1 * S5$

Mult.

Use the multiply instruction and multiply the first operand by the full precision approximate reciprocal of the second operand to complete the division sequence.