

MULTIPLICATION WORKSHEET

Program \_\_\_\_\_ Date \_\_\_\_\_

<u>Name of Field</u>	<u>Length of Field</u>	<u>Decimal Places</u>
Multiplicand _____	A = _____	C = _____
Multiplier _____	B = _____	D = _____
Product _____	H _____	E = _____

Computation of Character Adjustments

F = B - 1 = \_\_\_\_\_

G = A + B = \_\_\_\_\_

H = G + E + 1 - C - D = \_\_\_\_\_

J = H - 1 = \_\_\_\_\_

C + D - E = \_\_\_\_\_ If 0, see exception (2). If minus or greater than G, check for illogical demand.

Required Constants

<u>Count</u>	<u>Label</u>	<u>OP Code</u>	<u>Contents</u>
1	BFIELD	DCW *	Count must be at least as great as G.
		DC *	
1	FIVE	DCW *	5

Instructions

<u>Number</u>	<u>OP Code</u>	<u>A-Address</u>	<u>B-Address</u>
1	ZA	_____ Multiplier	BFIELD + _____ F
2	M	_____ Multiplicand	BFIELD + _____ G
3	A	FIVE	BFIELD + _____ H
4	MZ	BFIELD + _____ G	BFIELD + _____ J

The product is located at BFIELD + J, is signed, and is H digits in length.

Exceptions

- 1) If the Product is known to be positive, omit Instruction (4). The product will be unsigned except when C + D - E = 0.
- 2) If C + D - E = 0, omit Instructions (3) and (4). The Product will be signed.

Checks for illogical demands

- 1) C + D - E should not be negative.
- 2) C + D - E must not be greater than G.