```
/*  Multiplies two double matrices
 *
 *  @param m1 First matrix
 *  @param m2 Second matrix
 *  @return m1 multiplied by m2
 */
```

public static double[][] multiply(double[][] m1, double[][] m2)

int m1rows = m1.length;
int m1cols = m1[0].length;
int m2rows = m2.length;
int m2cols = m2[0].length;

m1cols != m2rows ?

Yes →

throw new
IllegalArgumentException("matrices don't match: "
+ m1cols + " != " + m2rows);

Exception

No ↓

double[][] result = new double[m1rows][m2cols];
int j = 0;

i < m1rows ?

No → Int l = 0

Yes → int j = 0

j < m2cols ?

No → i++

Yes ↓

result[i][j] = 0.0;

j++

l < m1rows ?

No → Return result;

End

Yes ↓

int j = 0

j < m2cols ?

No → i++

Yes ↓

int k = 0

k < m1cols ?

No → j++

Yes ↓

result[i][j] += m1[i][k] * m2[k][j];

k++