Name _____ Date _____

1. Estimate the product first. Solve by using the standard algorithm. Use your estimate to check the reasonableness of the product.

a. 312 × 149 ≈ 300 × 100 = 30,000 312 × 149 2808 12480 +31200 46,488	b. 743 × 295 ≈ 700 × 300 = 210000 743 × 295 3715 66870 +148600 219,185	c. 428 × 637 ≈ 400 × 600 = 240,000 428 × 637 2996 12840 +256800 272,636
d. 691 × 305 ≈ 700 × 300 = 210000 691 × 305 3455 +207300 210,755	e. 4,208 × 606 ≈ 4000 × 600 = 2,400,000 4208 × 606 25248 +2524800 2550,048	f. 3,068 × 523 ≈ 3,000 × 500 = 1,500,000 3068 × 523 9204 61360 +1534000 1,604,564
g. 430 × 3,064 ≈ 400 × 3000 = 1,200,000 3064 × 430 91920 +1225600 1,317,520	h. 3,007 × 502 ≈ 3000 × 500 = 1,500,000 3007 × 502 6014 +1503500 1,509,514	i. 254 × 6,104 ≈ 300 × 6000 = 1,800,000 6104 × 254 24416 305200 +1220800 1,550,416

2. When multiplying 1,729 times 308, Clayton got a product of 53,253. Without calculating, does his product seem reasonable? Explain your thinking.

1729×308

$\approx 2000 \times 300$

$= 600{,}000$

Clayton's product does not seem reasonable since our estimation is around 600,000.

3. A publisher prints 1,912 copies of a book in each print run. If they print 305 runs, the manager wants to know about how many books will be printed. What's a reasonable estimate?

1912×305

$\approx 2000 \times 300$

$= 600{,}000$

Around 600,000 copies.