## PRIME FACTOR SEARCH

| 2                     | 3 <sup>2</sup>        | 3                     | <b>5</b> <sup>3</sup> | 11                    | 2                     |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 13                    | 5                     | <b>3</b> <sup>3</sup> | 5 <sup>3</sup>        | <b>3</b> <sup>2</sup> | 3                     |
| 2                     | <b>3</b> <sup>2</sup> | 2                     | 24                    | 5                     | 7                     |
| <b>5</b> <sup>2</sup> | 11 <sup>2</sup>       | 3                     | 2 <sup>2</sup>        | 5                     | <b>2</b> <sup>2</sup> |
| 7                     | 3                     | 2                     | 7 <sup>2</sup>        | 3 <sup>2</sup>        | 13                    |
| <b>2</b> <sup>2</sup> | 7                     | 5 <sup>2</sup>        | 17                    | 11                    | <b>5</b> <sup>2</sup> |

WRITE DOWN THE NUMBERS THAT ARE LEFT AT THE END. WHAT IS THEIR PRODUCT?

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WRITE EACH NUMBER AS A PRODUCT OF PRIME FACTORS USING THE NUMBERS IN THE GRID. CROSS THEM OFF AS YOU USE THEM!

| 90 =   |  |
|--------|--|
| 100 =  |  |
| 189 =  |  |
| 80 =   |  |
| 340 =  |  |
| 450 =  |  |
| 858 =  |  |
| 1617 = |  |
| 1125 = |  |
| 750 =  |  |
| 182 =  |  |
| 1089 = |  |
| 1007 - |  |

## ANSWERS

$$90 = 2 \times 3^2 \times 5$$

$$100 = 2^2 \times 5^2$$

$$189 = 3^3 \times 7$$

$$80 = 2^4 \times 5$$

$$340 = 2^2 \times 5 \times 17$$

$$450 = 2 \times 3^2 \times 5^2$$

$$858 = 2 \times 3 \times 11 \times 13$$

$$1617 = 3 \times 7^2 \times 11$$

1125 = 
$$3^2 \times 5^3$$

$$750 = 2 \times 3 \times 5^3$$

$$182 = 2 \times 7 \times 13$$

$$1089 = 3^2 \times 11^2$$

## WRITE DOWN THE NUMBERS THAT ARE LEFT AT THE END. WHAT IS THEIR PRODUCT?

$$2100 = 2^2 \times 3 \times 5^2 \times 7$$