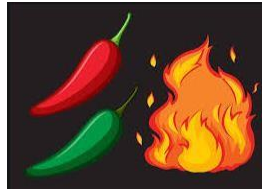


Maths Chilli Challenge – Multiplying 3 digit numbers by 2 digit numbers



Look at the challenges below, choose a level of chilli you want to start with. If you feel confident, have a go at the next set of questions. The answers will be published on Monday.



Mild

1a. Solve the calculation below using the fully expanded method.

| | | | | | | |
|---|--|---|---|---|---|--------------|
| | | 1 | 3 | 1 | 3 | |
| x | | | | 2 | 1 | |
| | | | | | | |
| | | | | | | (1 x 3) |
| | | | | | | (1 x 10) |
| | | | | | | (1 x 300) |
| | | | | | | (1 x 1,000) |
| | | | | | | (20 x 3) |
| | | | | | | (20 x 10) |
| | | | | | | (20 x 300) |
| | | | | | | (20 x 1,000) |
| | | | | | | |
| | | | | | | Total |

1a. $1,313 \times 21 = 27,573$

2a. A and 2; B and 1; C and 4; D and 3

2a. Match the calculations to the correct answers.

- | | |
|---|---|
| <p>A. $4,112 \times 11$</p> <p>B. $4,122 \times 12$</p> <p>C. $2,114 \times 11$</p> <p>D. $2,141 \times 12$</p> | <p>1. $49,464$</p> <p>2. $45,232$</p> <p>3. $25,692$</p> <p>4. $23,254$</p> |
|---|---|



Medium

3a. True or false?

$$2,111 \times 15 > 2,121 \times 14$$

4a. Solve the calculation using a formal multiplication method.

| | | | | | | |
|---|--|---|---|---|---|--|
| | | 3 | 8 | 0 | 2 | |
| x | | | | 2 | 3 | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

3a. **True** 4a. $3,802 \times 23 = 87,446$



Hot

5a. Match the calculations to the correct answers.

A. $4,242 \times 23$ 1. $50,904$

B. $4,242 \times 12$ 2. $77,064$

C. $2,424 \times 25$ 3. $97,566$

D. $6,422 \times 12$ 4. $60,600$

6a. True or false?

$$7,121 \times 32 = 7,132 \times 21$$

5a. A and 3; B and 1; C and 4; D and 2

6a. False, $7,121 \times 32 = 227,872$ and $7,132 \times 21 = 149,772$ therefore $7,121 \times 32 > 7,132 \times 21$.



Spicy

7a. Find the missing digits and complete the calculations.

A.

| | | | | | |
|-------|---|----------------------|----------------------|----------------------|----------------------|
| | | 2 | <input type="text"/> | 3 | 2 |
| x | | | | 3 | <input type="text"/> |
| <hr/> | | | | | |
| | | 2 | 4 | 3 | 2 |
| | 7 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| <hr/> | | | | | |
| | | | | | |
| <hr/> | | | | | |
| | | | | | |

B. $2,432 \times 3\text{} = 7\text{}, 824$

7a.

A.

| | | | | | |
|-------|---|---|---|---|---|
| | | 2 | 4 | 3 | 2 |
| x | | | | 3 | 1 |
| <hr/> | | | | | |
| | | 2 | 4 | 3 | 2 |
| | 7 | 2 | 9 | 6 | 0 |
| <hr/> | | | | | |
| | 7 | 5 | 3 | 9 | 2 |
| <hr/> | | | | | |
| | | | | | |

Which gives the bigger answer?

B. $2,432 \times 32 = 77,824$ so B gives the bigger answer.