

Name Colin - Brandon

The Pizza Problem

Conover Road School has asked us to help design a form to keep track of certain pizza choices.

They offer a cheese pizza with tomato sauce. A customer can then select from the following toppings: peppers, sausage, mushrooms, and pepperoni.

1. How many choices will customers have?
2. List all the possibilities.
3. Convince each other that you have accounted for all choices.

~~9th~~

P S M pepperoni

9th

✓ ✓

10th

✓

11th

✓ ✓ ✓ ✓

12

✓ ✓ ✓

13

✓ ✓ ✓

14

✓ ~~✓ ✓~~

~~15~~

~~|||||~~

| | x pepper | x sau. | x mush. | x pepperoni |
|-----------|----------|--------|---------|-------------|
| 1st pizza | ✓ | ✓ | | |
| 2nd pizza | ✓ | | ✓ | |
| 3rd pizza | ✓ | | | ✓ |
| 4th pizza | ✓ | ✓ | ✓ | |
| 5. | | ✓ | | ✓ |
| 6. | | ✓ | | |
| 7. | | | | |
| 8 | | | | ✓ |

Brandon

Brandon's
chart w/ the zeros
& ones put together

| | | | |
|-----------------|---|---|---|
| ✓ 10.0 | 1 | 0 | 0 |
| ✓ 11.0 | 0 | 1 | 1 |
| ✓ 12.1 | 1 | 1 | 0 |
| ✓ 13.1 | 0 | 1 | 1 |
| ✓ 14.1 | 1 | 0 | 1 |
| ✓ 15.1 | 1 | 1 | 1 |
| 16.0 | 0 | 1 | 1 |
| ✓ 16.0 | 1 | 1 | 1 |

AAA

| P | M | S | P |
|-------|---|---|---|
| ✓ 1.0 | 0 | 0 | 0 |
| ✓ 2.1 | 0 | 0 | 0 |
| ✓ 3.0 | 1 | 0 | 0 |
| ✓ 4.0 | 0 | 1 | 0 |
| ✓ 5.0 | 0 | 0 | 1 |
| ✓ 6.1 | 1 | 0 | 0 |
| ✓ 7.1 | 0 | 1 | 0 |
| ✓ 8.1 | 0 | 0 | 1 |
| ✓ 9.0 | 1 | 0 | 1 |

Brand on

P

S

M

Rep.

1

1

1

1

1

1

0

0

1

1

0

1

0

0

1

1

1

~~1~~

0

1

0

1

1

1

1

0

1