# CrossFigure - Challenging Puzzle #31

This puzzle is like a crossword, but with numbers. Each digit occupies a square and can be a part of a "word" in the across and down directions.

## Rules:
1. "Words" may not start with a zero.
2. "Words" read from left to right and top to bottom.
3. There is one unique solution which satisfies all the clues given below.
4. Some "words" may not have clues. They will be determined by the "words" which intersect them.

## Across

**1** 8 down plus 19 down
**3** 22 across times 28 down
**4** 11 down minus 22 across
**6** Five times a prime number
**7** A prime number
**8** 17 down minus 19 down
**12** 31 across minus 21 down
**13** Fourteen times a prime number
**14** 9 down minus 18 down
**17** Mean of 12 across and 4 down
**18** 6 across plus half of 27 across
**22** 3 across divided by 1 across
**25** 8 down plus 31 across
**27** Four times a prime number
**29** Twice the result of 16 down plus 19 down
**30** Twice the result of 13 across plus 4 down
**31** 9 down plus 18 down

## Down

**1** Thirty-nine times a square
**2** 25 across minus 8 down
**4** A cube
**5** 17 down plus 26 down
**8** 28 down minus 19 down
**9** 7 across minus 11 down
**10** 20 down reversed
**11** Mean of 31 across and 10 down
**15** 8 across divided by 12 across
**16** 15 down minus 29 across
**17** 5 down minus 17 across
**18** 2 down minus 9 down
**19** A square
**20** 25 across minus 14 across
**21** 8 down minus 16 down
**23** Mean of 24 across and 26 down
**26** 18 down plus 21 down
**28** A prime number

**Solution:**

| 5 | 9 | ■ | 4 | 3 | 6 | 6 | ■ | 2 | 4 |
|---|---|---|---|---|---|---|---|---|---|
| 6 | 9 | 5 | ■ | ■ | ■ | ■ | 1 | 7 | 9 |
| 1 | ■ | ■ | 4 | 8 | 9 | 9 | ■ | ■ | 6 |
| 6 | 9 | ■ | 3 | 1 | 7 | 8 | ■ | 6 | 3 |
| ■ | ■ | 7 | ■ | ■ | ■ | ■ | 1 | ■ | ■ |
| ■ | ■ | 1 | ■ | ■ | ■ | ■ | 3 | ■ | ■ |
| 4 | 8 | ■ | 1 | 1 | 7 | 3 | ■ | 7 | 4 |
| 9 | ■ | ■ | 8 | 6 | 9 | 0 | ■ | ■ | 3 |
| 1 | 4 | 2 | ■ | ■ | ■ | ■ | 9 | 5 | 6 |
| 5 | 8 | ■ | 6 | 4 | 1 | 0 | ■ | 9 | 9 |