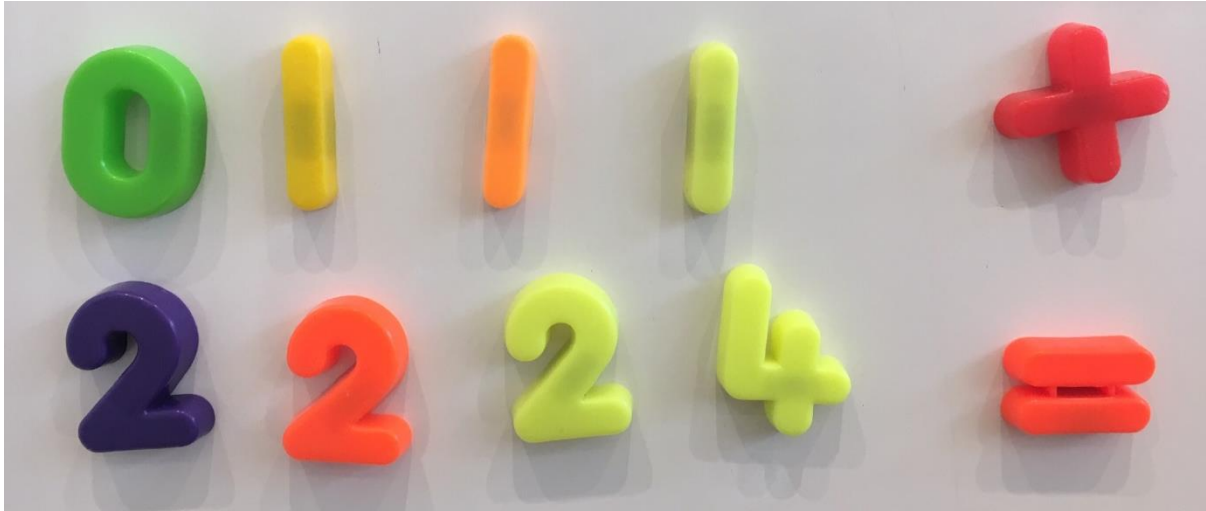# Fridge Magnet Arithmetic Challenge 5

Challenge: (Without using a calculator) form as many correct number sentences as you can from the following set of fridge magnets:

Example:

Rules: You can only use each symbol once.

You can use the + symbol as a + or a x.

We will consider $2 + 12 = 14$, $12 + 2 = 14$, $14 = 2 + 12$ and $14 = 12 + 2$ to be the *same* number sentence.

We won't allow the technically correct but uninteresting sentences like $1 = 1$.

Rating:

1 to 7:	Good start
8 to 10:	Doing well
11 to 13:	Highly commended
14 or more:	Excellent!

Fridge Magnet Arithmetic Challenge 5

So far I have found 17.

(Nice going if you have found any that aren't on the list below)

1. $0 + 1 = 1$
2. $0 + 2 = 2$
3. $0 + 12 = 12$
4. $0 + 21 = 21$
5. $1 + 1 = 2$
6. $2 + 2 = 4$
7. $11 + 1 = 12$
8. $10 + 2 = 12$
9. $12 + 2 = 14$
10. $21 + 1 = 22$
11. $1 \times 1 = 1$
12. $1 \times 2 = 2$
13. $1 \times 12 = 12$
14. $1 \times 21 = 21$
15. $2 \times 2 = 4$
16. $2 \times 12 = 24$
17. $2 \times 21 = 42$