

Inverse:

In mathematics, an **inverse** operation is an operation that undoes what was done by the previous operation. The four main mathematical operations are addition, subtraction, multiplication and division. The **inverse** of addition is subtraction and vice versa. The **inverse** of multiplication is division and vice versa.

So, we can use the inverse to solve a tricky calculation...

E.G.

If we know that $27+32=59$

We can use this to work out $59-27=32$

Inverse is particularly helpful with missing number problems...

E.G.

$$\boxed{} + 375 = 500$$

Use $500 - 375 = 125$ to find the missing number.

And, we can use sets of numbers to make a 'family' of calculations

E.G.

We can use the numbers 20, 30 and 50 to make four calculations

$$20+30=50$$

$$30+20=50$$

$$50-20=30$$

$$50-30=20$$

△ Use mental maths or jottings to solve these calculations using the inverse calculation.

$$854 + ? = 958$$

$$9854 - ? = 1352$$

$$? - 468 = 157$$

$$? + 957 = 6574$$

$$5678 - ? = 650$$

$$6571 + ? = 9852$$

$$9954 - ? = 9800$$

$$? - 674 = 1256$$

$$24 + ? = 4687$$

$$4466 - ? = 2222$$

$$? - 764 = 999$$

$$5975 + ? = 9547$$

$$? - 5541 = 2802$$

$$? + 968 = 1125$$

$$? - 602 = 1245$$

Extension: Choose 3 number cards to make a family of calculations.

25

40

44

36

17

12

11

29

23

13

15

30

48

78

$25+11=36$

$11+25=36$

$36-11=25$

$36-25=11$

