ALWAYS, SOMETIMES, NEVER

Answer all of these questions. Remember to show your working out in all questions.

MAIN QUESTIONS

1. 2. x + 3 = 3 + x**Always** 4. $x^2 = 2x$ **Sometimes** x + 1 = xNever $x^2 = -1$ Never 10. x + 0 = xAlways 11. 12. $x^2 = x$ **Sometimes** 13. 14. x + 5 = 5 - xSometimes

15.

3x = x + 2x

Always

17.

2(x - 3) = 2x - 6

Always

19.

x + 7 = 7 + x

Always

21.

x² = -4

x = -4
| Never
23.

2x + 1 = 2(x + 1)Never

x - x = 0

25.

Always 27.

x/4 = 4x

Sometimes 29.

2x + 3 = 3x + 2

Sometimes

16.

x/3 = 3x

Sometimes

18.

 $x^2 = 4$

Sometimes

20.

5x = 0

Sometimes

22.

4(x + 1) = 4x + 4

Always

24.

 $x^2 = 9$

Sometimes

26.

3x = x + x + x

Always

28.

 $\mathbf{x}^2 = \mathbf{x}^3$

Sometimes

30.

x + 2 = 2 + x

Always

MASTER QUESTIONS



```
A number plus 5 equals 5 plus the same number
  Always
M2.
Twice a number equals the number added to itself
  Always
M3.
A number squared equals twice the number
  Sometimes
M4.
Five minus a number equals the number minus five
  Sometimes
M5.
A number plus one equals the number itself
  Never
M6.
Three times a number plus six equals three times the sum of the number and
twa<sub>Always</sub>
M7.
A number squared equals negative one
  Never
M8.
Half of a number equals double the number
  Sometimes
```

M1.

M9.

A number plus zero equals the number itself

Always

M10.

Two times a number plus three equals three plus two times the number

Always