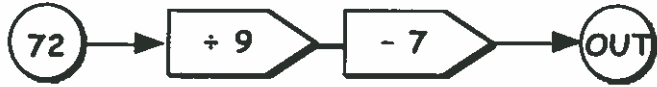




I can apply my knowledge of number facts to solve problems where an unknown value is represented by a symbol or letter.

1. a What number should come out of this number machine ?



b What number must have gone in this number machine ?



2. Write the sign (+, -, ÷, ×) or the number that stands for each time here :-

a $9 \text{ } 6 = 54$

b $\text{} \div 3 = 150$

c $10 \text{ } 2 \text{ } 10 = 30.$

3. Solve these equations to find the value of x . (Set down each step of working carefully).

a $x - 12 = 1$

b $6x = 42$

c $4x + 5 = 33$

d $2x - 7 = 2$

e $\frac{2}{3}x = 16$

f $\frac{1}{2}x - 6 = 4.$

4. There are t toffees in a tin. When 25 were eaten there were 75 left in the tin.

a Make up an equation about the information above.

b Solve your equation to find how many toffees are in a similar unopened tin.



5. In November, a car salesman sold c cars.



In early December he sold double that amount and later sold a further 8 cars, bringing his total sales to 22 for that month.

Make an equation about the December sales and solve it to determine how many cars he sold in November.

6. Copy the following and place a "<" sign or a ">" sign between the numbers as appropriate :-

a $53 \dots 63$

b $3 \dots -1$

c $-22 \dots -21.$

7. Make up an inequality for the statement below :-

"The entry cost into "U in the Field" is £120.

Stacey has £ P and can't afford to go to the event this year.

\Rightarrow So



8. In this question you can choose y only from the numbers $\{-4, -3, -2, -1, 0, 1, 2, 3\}$

Write down the solutions for :-

a $y > -2$

b $y < -3$

c $y \leq 1$

d $y \geq -1\frac{1}{2}.$

9. Solve the following inequalities, leaving your answer in the form, (e.g. $x > 2$).

a $x + 7 > 12$

b $x - 9 < 10$

c $4x \leq 36$

d $2x + 3 \geq 23.$