

M3 = 39 days to go!

8 Mr Jackson's car insurance is £840

He can either:

pay the full amount within seven days and receive 5% discount

or

pay by direct debit, which will cost 8% more.

The direct debit is paid in 12 equal monthly amounts.

(a) If he chooses direct debit, how much will his monthly payment be?

$$840 + 8\% = 840 + 67.20 = \pounds 907.20$$

$$\text{then } 907.20 \div 12 = \pounds 75.60 \text{ each month}$$

Answer £ 75.60 [3]

(b) How much extra will he pay if he chooses the direct debit instead of paying in full within seven days?

Within seven days 5% discount

$$840 - 42$$

$$\pounds 798$$

$$\text{Extra } \pounds 907.20 - 798$$

Answer £ 109.20 [2]

22 Solve the equation $x^2 - x - 12 = 0$

add
to
-1



2 numbers
multiply to
-12

$$(x - 4)(x + 3) = 0$$

$$x - 4 = 0$$

$$x + 3 = 0$$

Answer $x = 4$ & $x = -3$ [3]

26 After a 7.5% pay rise Mr Jones' salary was £29455

What was his salary before the pay rise?

$$\text{Salary} + 7.5\% = 29455$$

$$\begin{array}{l} ? \\ \cdot \\ 27400 \end{array} \xrightarrow{\times 1.075} 29455$$

Answer £ 27400 [3]