JustMaths
A vacuum cleaner costs $£ 85$. John gets a $10 \%$ discount off the cost price.

How much does he pay?

$$
\begin{aligned}
& 10 \%=£ 8.50 \\
& 85-8.50=£ 76.50
\end{aligned}
$$

Double check your
answers... lots of students
got the subtraction wrong
and wrote E77.50!!

JustMaths
Lizzie bought a van. The total cost of the van was $£ 6000$ plus VAT at 20 \%.


Lizzie paid $£ 3000$ when she got the van. She paid the rest of the total cost of the van in 10 equal monthly payments.

Work out the amount of each monthly payment.

$$
\begin{aligned}
& 10 \%=E 600 \\
& 20 \%=E \mid 200
\end{aligned}
$$

$$
\text { Total cost }=6000+1200=£ 7200
$$

less deposit $-\frac{3000}{4200}$
paid in 70 installments
$4200 \div 10$
$\Rightarrow £ 420$
per month

## JustMaths

A company sells boxes to factories.
Fred buys boxes.
The boxes are sold in packs of 1000.
Each pack costs $£ 193.86 \times 3$
Fred orders 3 packs of boxes.
He gets a discount on his total order.
The table shows the discount he will get.

| Total Order | Discount |
| :---: | :---: |
| $£ 100-£ 300$ | $5 \%$ |
| $£ 301-£ 400$ | $10 \%$ |
| $£ 401$ and above | $15 \%$ |

Work out the total cost of the order after the discount. You must show your working.

$$
193.86 \times 3=581.58
$$

$$
\begin{align*}
10 \% & =58.158 \\
5 \% & =29.079 \\
15 \% & =87.237 \\
& =\$ 87.24 \quad \text { Sunhat } \quad \text { this pout! } \tag{5}
\end{align*}
$$

Amount actually paid

$$
=5^{3} 8^{1} 1.58
$$

$$
\frac{-87.24}{494.34}=\{494.34
$$

JustMaths
Two shops both sell the same type of suit. In both shops the price of the suit was $£ 180$.

One shop increases the price of the suit by $171 / 2 \%$.
The other shop increases the price of the suit by $221 / 2 \%$.
Calculate the difference between the new prices of the suits in the two shops.

$$
\begin{align*}
& B \\
& \frac{A}{£ 180} \\
& \text { € } 180 \\
& 10 \%=18 \\
& 10 \%=18 \\
& 5 \%=9 \\
& 5 \%=9 \\
& 2 \frac{1}{2} \%=4.5 \\
& 2 \frac{1}{2} 9=4.50 \\
& \text { so } \\
& 17 \frac{1}{2} \varphi_{0}=£ 31.50 \quad 22 \frac{1}{2} \%_{0}=€ 40 \cdot 50 \\
& \text { totalpaio. } \\
& 180+31.50 \quad 180+40.50 \\
& =£ 211.50=E 220.50  \tag{3}\\
& \text { Difference = } £ 9
\end{align*}
$$

JustMaths
Railtickets and Cheaptrains are two websites selling train tickets. Each of the websites adds a credit card charge and a booking fee to the ticket price.

Railtickets
Credit card charge:
2.25\% of ticket price

Booking fee: 80 pence

Cheaptrains
Credit card charge: 1.5\% of ticket price

Booking fee: $£ 1.90$

Nadia wants to buy a train ticket. The ticket price is $£ 60$ on each website.

Nadia will pay by credit card.
Will it be cheaper for Nadia to buy the train ticket from Railtickets or from Cheaptrains?

$$
\begin{aligned}
& R \\
& £ 60 \\
& 10 \%=€ 6 \\
& 1 \%=0.60 p \\
& 0.5 \%=0.30 p \\
& 0.25 \%=0.15 p \\
& 2.25 \%=60 p+60 p+15 p \\
&=£ 1.35 \\
& \text { Bookungfee } \frac{0.80}{2.15}
\end{aligned}
$$

$$
\begin{gather*}
C \\
€ 60 \\
1.5 \%=60 p+30 p \\
=90 p  \tag{4}\\
\text { Boohingtea } 1.90 \\
E \frac{\overline{2.80}}{52.80}
\end{gather*}
$$

so Raultidedts is cheapest by 65 p

