Angles in Triangles
Calculate the size of the missing angles $a$ and $b$.


Area
Calculate the area of this shape.


## Quick Wits

## FOUNdation 1

## Percentage Increase

 and DecreaseA smart watch costs $£ 240$.
The shop selling the watch has a $15 \%$ sale. How much does the coat cost in the sale?


## Multiplication

John needs 32 pens.
Each pen costs 15p.
John has $£ 5$.
Does he have enough money?
Give a reason for your answer.
$\square$ No


## Ratio

Shannon and Courtney share £42 into the ratio 3:4.
How much money do they each receive?

## Expand and Factorise

1) Expand

$$
3(x+4)
$$

2) Expand and simplify

$$
4(x+5)-2(x-3)
$$

3) Expand

$$
(x+2)(x+7)
$$

4) Factorise Fully
$12 x-18$

Angles in Triangles
Calculate the size of the missing angles a and b .


Area
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# Quick Wits 

Shannon and Courtney share $£ 42$ into the ratio 3:4. How much money do they each receive?

## FoUNdation 1

Percentage Increase and Decrease
A smart watch costs $£ 240$. The shop selling the watch has a $15 \%$ sale. How much does the coat cost in the sale?
Non-Calculator Method
$10 \%=£ 24$ and $5 \%=£ 12$
$15 \%=£ 36$
Sale Price $=240-36=£ 204$


Calculator Method

$$
0.85 \times 240=£ 204
$$

## Multiplication

John needs 32 pens.
Each pen costs 15 p.
John has $£ 5 . \quad 32 \times 15=480 p=£ 4.80$
Does he have enough money?
Give a reason for your answer.

$\square$ No $\square$
The pens will cost $£ 4.80$ this means John will have $20 p$ change.
$3+4=7$
Per box $\frac{42}{7}=£ 6$
Shannon $=6 \times 3=£ 18$
Courtney $=6 \times 4=£ 24$


## Expand and Factorise

1) Expand

$$
\begin{aligned}
& 3(x+4) \\
& =3 x+12
\end{aligned}
$$

2) Expand and simplify

$$
\begin{aligned}
& 4(x+5)-2(x-3) \\
& =4 x+20-2 x+6 \\
& =2 x+26
\end{aligned}
$$

3) Expand
$(x+2)(x+7)$
$=x^{2}+2 x+7 x+14$
$=x^{2}+9 x+14$
4) Factorise Fully

$$
\begin{aligned}
& 12 x-18 \\
& =6(2 x-3)
\end{aligned}
$$

