1) a) $4 \times 2=8 \mathrm{~cm}^{2}$
b) $5 \times 3=15 \mathrm{~cm}^{2}$
2) a) $14 \mathrm{~cm} \times 6 \mathrm{~cm}=84 \mathrm{~cm}^{2}$
b) $7 \mathrm{~cm} \times 5 \mathrm{~cm}=35 \mathrm{~cm}^{2}$
3) a) 80 mm
b) 7 cm
4) Ania is incorrect. Using the formula base $\times$ perpendicular height to calculate the area of both the rectangle and the parallelogram will show Ania that both shapes actually have the same area of $32 \mathrm{~cm}^{2}$.
5) No. Although Hamish has correctly calculated that the first parallelogram has an area of $42 \mathrm{~cm}^{2}$, in the second parallelogram he has multiplied the base by a side length, rather than the perpendicular height.
The correct area of the second parallelogram is $7 \mathrm{~cm} \times 5 \mathrm{~cm}=35 \mathrm{~cm}^{2}$ so both of these parallelograms do not have an area of $42 \mathrm{~cm}^{2}$.
6) The parallelogram has an area of $84 \mathrm{~cm}^{2}$ so it could have the following dimensions:
base $=b$ and height $=h$
$b=3 \mathrm{~cm}$ and $h=28 \mathrm{~cm}$
$b=4 \mathrm{~cm}$ and $h=21 \mathrm{~cm}$
$b=6 \mathrm{~cm}$ and $h=14 \mathrm{~cm}$
$b=7 \mathrm{~cm}$ and $h=12 \mathrm{~cm}$
a) Each tile has an area of $240 \mathrm{~cm}^{2}$.
$4800 \div 240=20$
DIY Dan needs 20 tiles for this wall.
b) $£ 175 \div £ 3.50=50$

Dan used 50 more tiles to decorate the rest of his bathroom.

