Angles & Rectangles  page 1 of 2

1  Alexis put two 90 degree angles together to make a new angle. How many degrees does the new angle measure?
   a  $90^\circ \times 2 = \underline{\hspace{2cm}}$
   b  What kind of angle did Alexis make? Fill in the bubble to show.
       ○ acute angle (less than $90^\circ$)
       ○ right angle (exactly $90^\circ$)
       ○ obtuse angle (more than $90^\circ$ but less than $180^\circ$)
       ○ straight angle (exactly $180^\circ$)

2  Henry put three 45 degree angles together to make a new angle. How many degrees does the new angle measure?
   a  $45^\circ \times 3 = \underline{\hspace{2cm}}$
   b  What kind of angle did Henry make? Fill in the bubble to show.
       ○ acute angle
       ○ right angle
       ○ obtuse angle
       ○ straight angle

3  Austin put four 15 degree angles together to make a new angle. How many degrees does the new angle measure?
   a  $15^\circ \times 4 = \underline{\hspace{2cm}}$
   b  What kind of angle did Austin make? Fill in the bubble to show.
       ○ acute angle
       ○ right angle
       ○ obtuse angle
       ○ straight angle

(continued on next page)
4 Claudia drew and labeled a rectangle. Here is a miniature picture of her rectangle. Use this picture to help answer the questions below.

\[
\begin{array}{c}
37 \text{ cm} \\
\end{array}
\]

\[
\begin{array}{c}
4.3 \text{ cm} \\
\end{array}
\]

a What is the sum of the 4 interior angles in Claudia’s rectangle? Show your work.

b What is the perimeter of Claudia’s rectangle? Show your work.

c What is the area of Claudia’s rectangle? Show your work.

d **CHALLENGE** Claudia colored half of her rectangle blue. What is the area of the blue part of the rectangle? Show your work.