## Compare Area of Rectangles Answers

1. Here are some rectangles drawn to scale. Measure and calculate the area of each rectangle. Compare each pair of rectangles using <, > or $=$.

| Number | Length | Width | Area $=$ |  | Length | Width | Area $=$ |
| :---: | :--- | :--- | :--- | :---: | :--- | :--- | :--- |
| a. | 6 cm | 4 cm | $24 \mathrm{~cm}^{2}$ | $=$ | 8 cm | 3 cm | $24 \mathrm{~cm}^{2}$ |
| b. | 6 cm | 6 cm | $36 \mathrm{~cm}^{2}$ | $>$ | 7 cm | 5 cm | $35 \mathrm{~cm}^{2}$ |
| c. | 4 cm | 7 cm | $28 \mathrm{~cm}^{2}$ | $>$ | 9 cm | 3 cm | $27 \mathrm{~cm}^{2}$ |

2. Look at the dimensions of these rectangles. Can you complete the table by comparing each pair of rectangles?

| Rectangle $\mathbf{A}$ |  | Rectangle B |
| :---: | :---: | :---: |
| $9 \mathrm{~m} \times 6 \mathrm{~m}$ | $<$ | $8 \mathrm{~m} \times 7 \mathrm{~m}$ |
| Area $=54 \mathrm{~m}^{\mathbf{2}}$ | $>$ | Area $=\mathbf{5 6 \mathbf { m } ^ { 2 }}$ |
| $9 \mathrm{~m} \times 9 \mathrm{~m}$ | $10 \mathrm{~m} \times 8 \mathrm{~m}$ |  |
| Area $=81 \mathrm{~m}^{2}$ | $=$ | Area $=80 \mathrm{~m}^{2}$ |

3. Draw two rectangles with a difference of $\mathbf{1 \mathbf { c m } ^ { 2 }}$ and compare them using <or $>$.

Accept any two rectangles with a difference of $1 \mathrm{~cm}^{2}$.
4. Rectangles must always have the same length and width in order to have the same area. Is this statement true or false? Explain your answer fully.

Accept any explanation that shows that the statement is false. For example, a rectangle could be 5 cm in length, 4 cm in width and have an area of $20 \mathrm{~cm}^{2}$ while another could have a length of 20 cm , a width of 1 cm and also have an area of $20 \mathrm{~cm}^{2}$.

