**A**. **1.** Which rectangles are similar? **Explain** your reasoning.



**2.** For each rectangle, find the **ratio** of the length of a short side to the length of a long side. Write in **both fraction** **form** and **decimal form.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Rectangle | Length of Short side (**S**) | Length of Long side (**L**) | Ratio **S** to **L** | Fraction Form | Decimal Form |
| A |   |   |   |  |  |
| B |   |   |   |  |  |
| C |   |   |   |  |  |
| D |   |   |   |  |  |

**2a**. What do you notice about the **ratios** in part (2) for the rectangles that **are** similar?

**b.** What do you notice about the **ratios** in part (2) for the rectangles that are **not** similar?

**3a**. Choose two similar rectangles. Find the **scale factor** from the smaller rectangle to the larger rectangle.

**b.** What does the **scale factor** tell you?

**4**.Write what it means to be mathematically similar using ratios. *Two shapes are mathematically similar if….*

**B.** 1. Which of the parallelograms below are similar? Explain how you know.



**2.** For each parallelogram, find the **ratio** of the length of a long side to the length of a short side. Write the ratio in **fraction and decimal form**.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Parallelogram | **Long side (L)** | **Short side (S**) | Ratio **L** to **S** | Fraction Form | Decimal Form |
| E |   |   |   |  |  |
| F |   |   |   |  |  |
| G |   |   |   |  |  |

3. How do the **ratios** compare?

**\*Do you need to go back to A4 on the front and change or add to your answer?**