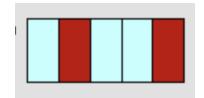
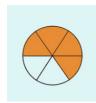
## Fractions

While working in a group make sure you:

- Expect to make mistakes but be sure to reflect/learn from them!
- Are civil and are aware of your impact on others.
- Assume and engage with the strongest argument while assuming best intent.
- 1. Find the fraction for the shaded part of each figure





- 2. Sketch a model for  $\frac{2}{3}$  and  $\frac{11}{6}$
- 3. For (2) determine which fraction is larger.

4. Let a be a non-zero integer. Simplify the fractions to put them in lowest terms:

(a) 
$$\frac{20+8}{24}$$

(b) 
$$\frac{4a}{6a^2}$$

(c) 
$$\frac{6+2a}{10a}$$

- 5. Let a, b, and c be numbers. Determine if the following statements are always true, sometimes true, or never true. Briefly justify your answer.
  - (a) If b divides a, then a can be used as a common denominator when comparing  $\frac{1}{a}$  and  $\frac{1}{b}$ .

(b) A rational number  $\frac{a}{b}$  is in its reduced form if LCM(a,b)=1.

6. Let a be a non-zero integer. The following work is wrong. Detect the error and try to detect the reason for the error:

$$\frac{2a+a^2}{3a} = \frac{2+a^2}{3}$$