

Name \_\_\_\_\_

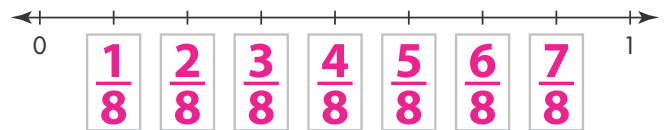
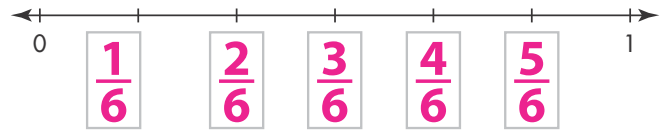
1. Marilyn and Lee are painting a fence. So far, Marilyn has painted  $\frac{1}{6}$  of the fence, and Lee has painted  $\frac{2}{6}$  of the fence. Who has completed more of the fence? Explain. **2 points**

**Lee; Sample answer:**  
The fractions  $\frac{1}{6}$  and  $\frac{2}{6}$  have the same denominator.  $2 > 1$ , so  $\frac{2}{6} > \frac{1}{6}$ .

2. Alex can compare  $\frac{5}{6}$  and  $\frac{5}{8}$  without using fraction strips. He says that a whole divided into 6 equal parts will have larger parts than the same whole divided into 8 equal parts. Five larger parts must be more than five smaller parts, so  $\frac{5}{6}$  is greater than  $\frac{5}{8}$ . Is Alex correct? If not, explain Alex's error. Write the correct comparison using symbols. **2 points**

**Yes, Alex is correct;**  
 $\frac{5}{6} > \frac{5}{8}$ .

3. Aoki completed  $\frac{3}{6}$  of a distance-running challenge. Faye completed  $\frac{3}{8}$  of the same challenge. Use the number lines to compare how far Aoki and Faye each ran. Who ran the farther distance? **2 points**



**Check students' work;**  
**Aoki**

4. A pie is cut into 8 equal pieces. What fraction represents the entire pie? Explain. **2 points**

**$\frac{8}{8}$ ; Sample answer:**  
Because there are 8 equal pieces that make up the total pie, you put 8 in both the numerator and the denominator, meaning that the entire pie has 8 of the 8 total pieces.

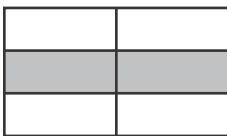
5. Alisha and Rose each have a bracelet that has the same number of beads. Of the beads in Alisha's bracelet,  $\frac{5}{6}$  are red. Of the beads in Rose's bracelet,  $\frac{2}{6}$  are red. Which bracelet has a fraction of red beads closer to 0 than to 1? Explain how you found your answer. Then tell which bracelet has more red beads. **3 points**

**Rose's bracelet; Sample answer: I compared both fractions to the benchmark  $\frac{1}{2}$ , which is halfway between 0 and 1. Because  $\frac{2}{6}$  is less than  $\frac{1}{2}$  and  $\frac{5}{6}$  is greater than  $\frac{1}{2}$ , Rose's fraction is closer to 0 than to 1. Alisha's bracelet has more red beads.**

7. Garry, Barry, and Larry each had casseroles for their graduation. The casseroles were the same size and cut into fourths. At their party, the guests ate  $\frac{3}{4}$  of Garry's casserole,  $\frac{1}{4}$  of Barry's casserole, and  $\frac{2}{4}$  of Larry's casserole. The guests ate the most of whose casserole? Explain. **2 points**

**Garry's; Sample answer: Because the denominators are the same, for  $\frac{3}{4}$ ,  $\frac{1}{4}$ , and  $\frac{2}{4}$ , I compared the numerators:  $3 > 2 > 1$ . So,  $\frac{3}{4} > \frac{2}{4} > \frac{1}{4}$ .**

6. Tami colored the fraction model below.
- A. Which fractions name the shaded part of the model? Select all that apply.



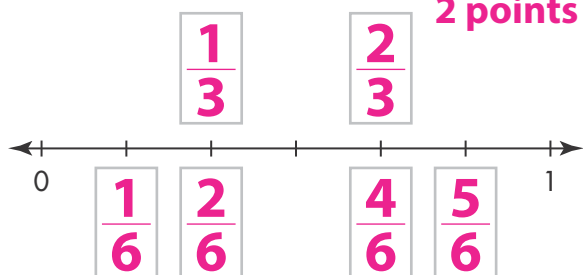
**1 point**

- $\frac{4}{6}$         $\frac{1}{2}$         $\frac{2}{4}$   
  $\frac{2}{6}$         $\frac{1}{3}$

- B. Does  $\frac{2}{3}$  name the unshaded part of the model? Explain. **2 points**

**Yes; Sample answer:  $\frac{4}{6}$  of the model is not shaded, and  $\frac{4}{6} = \frac{2}{3}$ .**

8. Noah wants to know if two pieces of wood are the same length. One piece of wood is  $\frac{4}{6}$  yard long. The other is  $\frac{2}{3}$  yard long. Are they the same length? Fill in the fractions on the number line to compare the lengths of the pieces of wood. Then explain your answer. **2 points**



**The pieces of wood are the same length; Sample answer:  $\frac{2}{3}$  and  $\frac{4}{6}$  name the same point on the number line.**

9. Olivia used colored ribbon for a craft project. She used  $\frac{2}{6}$  yard of green,  $\frac{2}{3}$  yard of red, and  $\frac{2}{4}$  yard of yellow. Use benchmark fractions to arrange the lengths of the ribbons in order from shortest to longest ribbon. **1 point**

**$\frac{2}{6}$ ,  $\frac{2}{4}$ ,  $\frac{2}{3}$**

10. A garden is divided into 5 equal parts. What fraction represents the entire garden? Explain. **2 points**

**$\frac{5}{5}$ ; Sample answer: Because there are 5 equal parts to the garden, both the numerator and the denominator of the fraction will be 5 to represent the whole.**

11. Erika spent  $\frac{1}{4}$  of her allowance. Write an equivalent fraction for the amount she did **NOT** spend. Then write a fraction that is equivalent to the amount of her allowance that Erika did spend, and explain why your answer is correct. **3 points**

**Sample answer:  $\frac{6}{8}$ ;  $\frac{2}{8}$ ; I used fraction strips to find the equivalent fractions.**

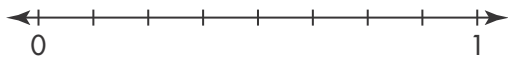
12. Circle each fraction that is equivalent to 1. Explain your reasoning. Then give another fraction that is equal to 1.

$\frac{1}{4}$     $\frac{3}{4}$     $\frac{8}{8}$     $\frac{4}{4}$     $\frac{6}{8}$    **3 points**

**Sample answer: If a fraction is equal to 1, then the numerator and denominator must be equal. Another fraction is  $\frac{8}{8}$ .**

13. Use the number line to help order the fractions from least to greatest. Then explain how you found your answer.

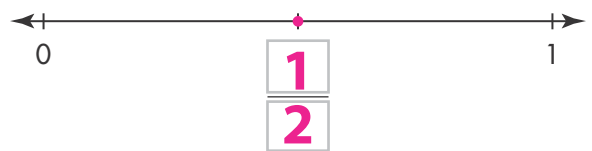
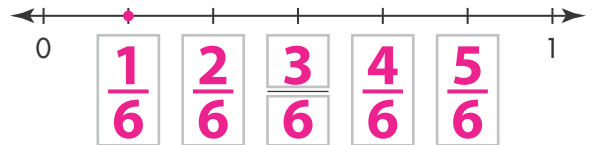
$\frac{4}{8}$     $\frac{4}{4}$     $\frac{1}{8}$     $\frac{1}{4}$     $\frac{3}{4}$    **2 points**



$\frac{1}{8}$     $\frac{1}{4}$     $\frac{4}{8}$     $\frac{3}{4}$     $\frac{4}{4}$ ; **Sample answer: I plotted each of the fractions on the number line and then listed them in order from closest to 0 to farthest from 0.**

14. Chase and Abigail walked the same distance to school. In ten minutes, Chase walked  $\frac{1}{6}$  of the distance and Abigail walked  $\frac{1}{2}$  of the distance. Conjecture: In ten minutes, Abigail walked farther than Chase.

- A. Complete the number lines to help think about the conjecture. **1 point**



- B. Use the number lines to decide if the conjecture is correct. Explain. **2 points**

**It is correct; Sample answer: The number lines show that the fractions are not equivalent. Abigail has walked farther than Chase.**

15. For each pair of fractions, write the equivalent whole number in the box.

$\frac{12}{4} = \frac{6}{2} = \boxed{3}$    **1 point**

$\frac{24}{6} = \frac{12}{3} = \boxed{4}$

$\frac{8}{8} = \frac{3}{3} = \boxed{1}$