Student Activity: Comparing Fractions

Use in connection with the interactive file, ‘Comparing Fractions’, on the Student’s CD.

1. Represent the following fractions on the set of number lines provided and state which fraction is the bigger in each case.

   a. \( \frac{1}{4} \text{ and } \frac{1}{8} \)

   b. \( \frac{7}{8} \text{ and } \frac{9}{10} \)

   c. \( \frac{3}{4} \text{ and } \frac{5}{6} \)

   d. \( \frac{7}{8} \text{ and } \frac{5}{6} \)

2. What is the relationship between the numerator and the denominator when the fraction is less than 1?

   _______________________________________________________________________

3. What is the relationship between the numerator and the denominator when the fraction is greater than 1?

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4. Is the fraction \( \frac{4}{6} = \frac{2}{3} \)? Explain.

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5. Which would be a better deal, $\frac{2}{3}$ or $\frac{5}{6}$ of a sum of money? Explain your answer.

6. List 4 fractions that are equivalent to (have the same value as) $\frac{1}{4}$.

7. Looking at 2 fractions on two number lines how would you know if they were equivalent? Illustrate your answer with an example using the number lines provided.

8. I gave $\frac{7}{8}$ of a bar of chocolate to Joel. I gave the same amount of chocolate to Irene from a bar with 16 sections. How many sections did Irene get?

9. Jonathan got 7 out of 12 in a test and Mark got 10 out of 15 in another test. Did the students do equally well because they both got 5 questions wrong in their tests? Explain your answer.

10. Two students plan to buy a new outfit for themselves. Margaret’s chosen outfit costs €40 and she has saved €22. Ellie’s chosen outfit costs €50 and she has €25 saved.
   a. What fraction of the cost of her outfit has Margaret saved?
   b. What fraction of the cost of her outfit has Ellie saved?
   c. Which student has saved the higher fraction of the cost of their new outfit? Explain.
   d. Provided they each save the same amount each week from now on which student will get their outfit first? Explain.