

MY Homework

Lesson 8

Compare Fractions

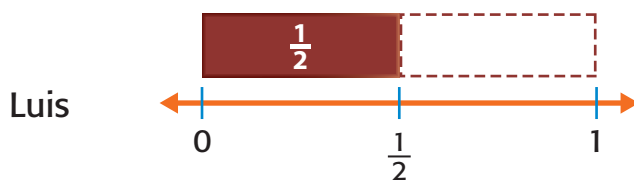
Homework Helper



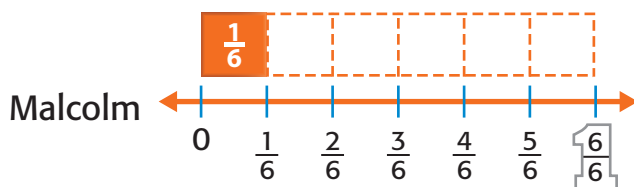
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Luis and Malcolm are both on the tennis team. Luis has won $\frac{1}{2}$ of his matches. Malcolm has won $\frac{1}{6}$ of his matches. They both played the same number of matches. Who has won the greater fraction of matches?

Compare $\frac{1}{2}$ and $\frac{1}{6}$.



The smaller denominator of 2 means fewer, but larger parts.



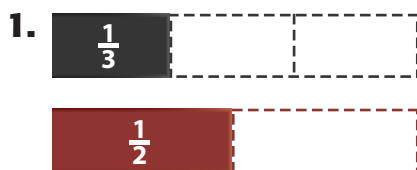
The larger denominator of 6 means more, but smaller parts.

The models show that $\frac{1}{2}$ has a greater size than $\frac{1}{6}$.

So, $\frac{1}{2} > \frac{1}{6}$. Luis won a greater fraction of matches.

Practice

Use the models to compare. Use $>$, $<$, or $=$.

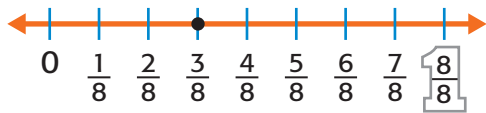
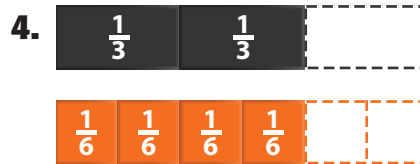
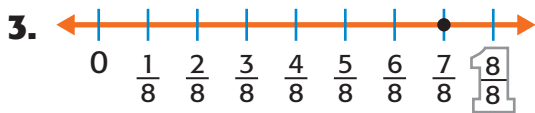


$$\frac{1}{3} < \frac{1}{2}$$



$$\frac{5}{6} > \frac{4}{6}$$

Use the models to compare. Use $>$, $<$, or $=$.



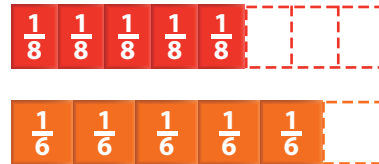
$$\frac{7}{8} > \frac{3}{8}$$

$$\frac{2}{3} = \frac{4}{6}$$



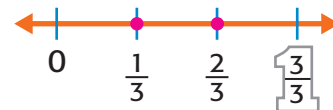
Problem Solving

5. **Mathematical PRACTICE 3** **Justify Conclusions** Harvey practiced the piano for $\frac{5}{8}$ of an hour. Annika practiced the piano for $\frac{5}{6}$ of an hour. Use the models to determine who practiced the piano for a longer period of time.



Annika practiced the piano longer.

6. **Mathematical PRACTICE 5** **Use Math Tools** The average housecat sleeps about $\frac{2}{3}$ of a day. Most people sleep about $\frac{1}{3}$ of the day. Do housecats or people sleep for a greater fraction of the day? Graph both fractions on the number line to compare.



Housecats sleep for a greater fraction of the day.

Test Practice

7. The number line shows which of the following fractions is less than $\frac{2}{4}$?

- (A) $\frac{1}{4}$ (C) $\frac{3}{4}$
 (B) $\frac{2}{4}$ (D) $\frac{4}{4}$

