Key Concept and Vocabulary

$2 \cdot 4 = 8 \qquad 3 \cdot 3 = 9$
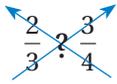
$\dfrac{2}{3} \; ? \; \dfrac{3}{4}$

Comparing Fractions

Find products.

$\dfrac{2}{3} < \dfrac{3}{4}$ because $8 < 9$.

Visual Model

$\dfrac{2}{3}$

$\dfrac{2}{3} < \dfrac{3}{4}$

$\dfrac{3}{4}$

Skill Examples

1. $\dfrac{1}{2} > \dfrac{5}{11}$ because $1 \cdot 11 > 2 \cdot 5$.

2. $\dfrac{3}{6} = \dfrac{1}{2}$ because $3 \cdot 2 = 6 \cdot 1$.

3. $\dfrac{3}{8} < \dfrac{2}{5}$ because $3 \cdot 5 < 8 \cdot 2$.

4. $\dfrac{4}{9} > \dfrac{3}{7}$ because $4 \cdot 7 > 9 \cdot 3$.

Application Example

5. You run seven-eighths mile. Your friend runs eight-tenths mile. Who runs farther?

$\dfrac{7}{8} > \dfrac{8}{10}$ because $7 \cdot 10 > 8 \cdot 8$.

⋯ You run farther.

PRACTICE MAKES PURR-FECT™

Check your answers at BigIdeasMath.com.

Compare the fractions using <, >, or =.

6. $\dfrac{4}{5} \square \dfrac{8}{11}$

7. $\dfrac{6}{7} \square \dfrac{5}{6}$

8. $\dfrac{6}{7} \square \dfrac{7}{8}$

9. $\dfrac{3}{11} \square \dfrac{6}{22}$

10. $\dfrac{9}{2} \square \dfrac{14}{3}$

11. $\dfrac{3}{9} \square \dfrac{1}{3}$

12. $\dfrac{4}{9} \square \dfrac{9}{20}$

13. $\dfrac{7}{12} \square \dfrac{4}{7}$

14. $\dfrac{2}{9} \square \dfrac{4}{18}$

15. $\dfrac{3}{8} \square \dfrac{4}{11}$

16. $\dfrac{7}{5} \square \dfrac{13}{9}$

17. $\dfrac{6}{5} \square \dfrac{11}{10}$

Compare the fractions models using <, >, or =.

18.

19.

20. **MILK** You drink six-eighths of a quart of milk. Your friend pours a quart of milk into four 8-fluid ounce glasses and drinks three of them. Who drinks more? _____

21. **ORDERING FRACTIONS** Order the fractions from least to greatest and graph them on a number line: $\dfrac{3}{8}, \dfrac{1}{4}, \dfrac{1}{3},$ and $\dfrac{2}{5}$.