

Grade 4 · Equivalent Fractions and Comparing Fractions · Test Answer Key

Common Core 4.NF.A.1, 4.NF.A.2 · mathovore.fr

Use this answer key to score the equivalent fractions test. Each solution shows a complete method and a scoring guide, so partial credit can be awarded when part of the work is right.

Grade 4 Common Core: 4.NF.A.1 · 4.NF.A.2

Question 1: Reading the models (2 points)

- a. Bar 1: $\frac{3}{4}$. Bar 2: $\frac{6}{8}$.
b. Yes. Both bars have the same length shaded, so $\frac{3}{4} = \frac{6}{8}$. Also, $3 \times 2 = 6$ and $4 \times 2 = 8$.

Scoring: (a) 1 point for both fractions. (b) 1 point for "yes" with a correct reason.

Question 2: Missing numbers (2 points)

- a. $5 \times 3 = 15$, so the numerator is $3 \times 3 = 9$. **9**
b. $18 \div 6 = 3$, so the denominator is $24 \div 6 = 4$. **4**

Scoring: 1 point for each correct number.

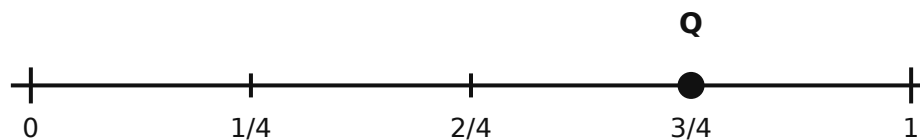
Question 3: Changing the denominator (2 points)

- a. $5 \times 2 = 10$ and $6 \times 2 = 12$: $\frac{10}{12}$
b. $6 \div 2 = 3$ and $10 \div 2 = 5$: $\frac{3}{5}$

Scoring: 1 point for each equivalent fraction.

Question 4: Number line (2 points)

- a. P is $\frac{3}{8}$ and Q is $\frac{6}{8}$.
b. $6 \div 2 = 3$ and $8 \div 2 = 4$: $\frac{3}{4}$



Q is at three fourths.

Scoring: (a) 1 point for both fractions. (b) 1 point for $\frac{3}{8}$.

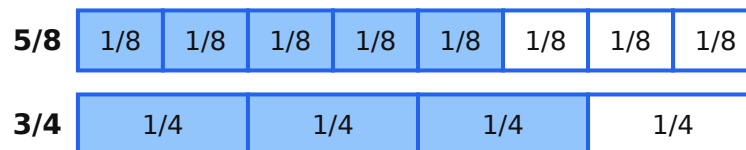
Question 5: Compare with symbols (3 points)

- a. Half of 8 is 4 and $3 < 4$. $\frac{3}{8} < \frac{1}{2}$
b. $\frac{2}{3} = \frac{8}{12}$ and $7 < 8$. $\frac{7}{12} < \frac{2}{3}$
c. Same numerator, and sixths are smaller pieces than fifths. $\frac{4}{6} < \frac{4}{5}$

Scoring: 1 point for each correct symbol.

Question 6: Is Maya correct? (2 points)

No. $\frac{3}{4} = \frac{6}{8}$, and 6 eighths is more than 5 eighths. So $\frac{5}{8} < \frac{3}{4}$. The numerators can only be compared when the denominators are the same.



The 3/4 bar is longer.

Scoring: 1 point for saying no. 1 point for a correct explanation with equivalent fractions or a model.

Question 7: Order three fractions (2 points)

Use denominator 6: $\frac{1}{2} = \frac{3}{6}$, $\frac{2}{3} = \frac{4}{6}$, and $\frac{5}{6}$. Since $3 < 4 < 5$:

$$\frac{1}{2} < \frac{2}{3} < \frac{5}{6}$$

Scoring: 1 point for a correct common denominator method. 1 point for the correct order.

Question 8: Chapter reading (3 points)

- a. $\frac{3}{5} = \frac{6}{10}$ and $6 < 7$, so $\frac{3}{5} < \frac{7}{10}$. **Aisha**
b. $\frac{3}{5} = \frac{6}{10}$ and $\frac{1}{2} = \frac{5}{10}$. Since $6 > 5$, **Diego**.

Scoring: (a) 1 point for a common denominator, 1 point for Aisha. (b) 1 point for Diego with a correct comparison.

Question 9: Tenths and hundredths (2 points)

$\frac{7}{10} = \frac{70}{100}$. Since $70 > 65$, $\frac{7}{10} > \frac{65}{100}$.

Scoring: 1 point for rewriting with denominator 100. 1 point for the correct comparison.

Total
20 points