FIBO · LEARN, PRACTICE & EXPLORE MATH

Unit 2 · Fractions — Unit Test

16 questions · 16 points · full worked solutions inside

ANSWER KEY — TEACHERS & PARENTS

Name _____ Date _____

Class _____

Directions: This key shows a full worked solution for every question. Final answers are boxed.

1 **Write “eleven twentieths” as a fraction.** (e.g. 3/4) [1 pt]

Solution. $\boxed{\frac{11}{20}}$

2 **Simplify $\frac{12}{18}$ to lowest terms.** (e.g. 3/4) [1 pt]

Solution.

$\frac{12}{18} \div \frac{6}{6} = \frac{2}{3}$.

$\boxed{\frac{2}{3}}$

3 **Reduce $\frac{15}{25}$ to simplest form.** (e.g. 3/4) [1 pt]

Solution.

$\frac{15}{25} \div \frac{5}{5} = \frac{3}{5}$.

$\boxed{\frac{3}{5}}$

4 **Are $\frac{4}{6}$ and $\frac{10}{15}$ equivalent?** [1 pt]

Solution.

$\frac{4}{6} = \frac{2}{3}$ and $\frac{10}{15} = \frac{2}{3}$.

Yes — both equal $\frac{2}{3}$.

5 **Which is smaller: $\frac{3}{4}$ or $\frac{5}{6}$? Type the smaller fraction.** (e.g. 3/4) [1 pt]

Solution.

$\frac{3}{4} = \frac{9}{12}$ and $\frac{5}{6} = \frac{10}{12}$. $9 < 10$.

$\frac{3}{4}$ is smaller.

6 **Order from least to greatest: $\frac{1}{2}$, $\frac{3}{5}$, $\frac{2}{3}$.** [1 pt]

Solution.

$\frac{1}{2} = 0.5$, $\frac{3}{5} = 0.6$, $\frac{2}{3} \approx 0.667$.

$\frac{1}{2}$, $\frac{3}{5}$, $\frac{2}{3}$

7 **$\frac{5}{12} + \frac{1}{4} = ?$** (e.g. 3/4) [1 pt]

Solution.

$\frac{1}{4} = \frac{3}{12}$, so $\frac{5}{12} + \frac{3}{12} = \frac{8}{12} = \frac{2}{3}$.

$\frac{2}{3}$

8 $\frac{9}{10} - \frac{2}{5} = ?$ (e.g. 3/4) [1 pt]

Solution.
$\frac{2}{5} = \frac{4}{10}$, so $\frac{9}{10} - \frac{4}{10} = \frac{5}{10} = \frac{1}{2}$.

$\boxed{\frac{1}{2}}$

9 $\frac{3}{4} \times \frac{2}{5} = ?$ **(Simplest form.)** (e.g. 3/4) [1 pt]

Solution.
$\frac{3}{4} \times \frac{2}{5} = \frac{6}{20} = \frac{3}{10}$.

$\boxed{\frac{3}{10}}$

10 $\frac{5}{6} \div \frac{5}{6} = ?$ (e.g. 3/4) [1 pt]

Solution. $\boxed{1}$

11 $\frac{1}{2} \div \frac{1}{4} = ?$ (e.g. 3/4) [1 pt]

Solution.
$\frac{1}{2} \times \frac{4}{1} = \frac{4}{2} = 2$.

$\boxed{2}$

12 $\frac{2}{3} + \frac{1}{6} \times \frac{1}{2} = ?$ (e.g. 3/4) [1 pt]

Solution.

Step 1 — $\frac{1}{6} \times \frac{1}{2} = \frac{1}{12}$.

Step 2 — $\frac{2}{3} + \frac{1}{12} = \frac{8}{12} + \frac{1}{12} = \frac{9}{12} = \frac{3}{4}$.

$\frac{3}{4}$

13 **Maya computed $\frac{1}{2} + \frac{1}{3}$ as $\frac{2}{5}$. What went wrong?** [1 pt]

Solution.

$\frac{1}{2} + \frac{1}{3} = \frac{3}{6} + \frac{2}{6} = \frac{5}{6}$, not $\frac{2}{5}$.

She added tops and bottoms — find a common denominator first.

14 **Convert $4\frac{2}{3}$ to an improper fraction.** (e.g. 3/4) [1 pt]

Solution.

4 × 3 + 2 = 14, over 3.

$\frac{14}{3}$

15 **Convert $\frac{19}{4}$ to a mixed number.** (Type like 2 3/4.) [1 pt]

Solution.

19 ÷ 4 = 4 remainder 3.

$4\frac{3}{4}$

16 **A recipe needs $2\frac{1}{2}$ cups of flour. You have $1\frac{3}{4}$ cups. How many more cups do you need?** (e.g. 3/4) [1 pt]

Solution.

$2\frac{1}{2} - 1\frac{3}{4} = \frac{10}{4} - \frac{7}{4} = \frac{3}{4}$.

$\frac{3}{4}$ **cups**

Grade chart

Grade	Percent	Points (of 16)
A	90–100%	14.5–16 pts
B	80–89%	13–14 pts
C	70–79%	11.5–12.5 pts
D	60–69%	10–11 pts
F	Below 60%	below 10 pts