

Class 6 Maths**Fractions****Worksheet 2 – Reducing Fractions to Lowest Terms****SECTION A – MCQs 1 Mark Each**

1. The simplest form of $\frac{12}{18}$ is:
a $\frac{4}{6}$
b $\frac{3}{6}$
c $\frac{2}{3}$
d $\frac{6}{9}$
2. HCF of 20 and 30 is:
a 5
b 10
c 15
d 20
3. Which fraction is already in lowest form?
a $\frac{8}{12}$
b $\frac{5}{7}$
c $\frac{10}{15}$
d $\frac{12}{18}$
4. Simplify $\frac{24}{36}$.
a $\frac{2}{3}$
b $\frac{3}{4}$
c $\frac{4}{5}$
d $\frac{6}{9}$
5. Which common factor can reduce $\frac{16}{24}$?
a 2
b 4
c 8
d All of these
6. Simplest form of $\frac{45}{60}$ is:
a $\frac{3}{4}$
b $\frac{5}{6}$

- c $\frac{2}{5}$
d $\frac{9}{12}$

7. Which fraction is equivalent to $\frac{1}{2}$?

- a $\frac{3}{5}$
b $\frac{2}{4}$
c $\frac{5}{8}$
d $\frac{4}{9}$

8. Simplify $\frac{36}{54}$.

- a $\frac{2}{3}$
b $\frac{3}{4}$
c $\frac{4}{5}$
d $\frac{1}{2}$

9. The HCF of 14 and 21 is:

- a 3
b 14
c 7
d 21

10. Simplest form of $\frac{27}{45}$ is:

- a $\frac{2}{5}$
b $\frac{3}{5}$
c $\frac{4}{5}$
d $\frac{1}{5}$

SECTION B – Fill in the Blanks

- $\frac{18}{24} = \underline{\hspace{2cm}}$ in lowest form.
- The HCF of 16 and 24 is $\underline{\hspace{2cm}}$.
- A fraction in lowest form has no common factor except $\underline{\hspace{2cm}}$.
- $\frac{42}{56} = \underline{\hspace{2cm}}$.
- Prime factors of 18 are $\underline{\hspace{2cm}}$ and $\underline{\hspace{2cm}}$.

SECTION C – True or False

- $\frac{9}{12}$ is in lowest form. $\underline{\hspace{2cm}}$

2. $\frac{2}{3}$ and $\frac{4}{6}$ are equivalent fractions. _____
 3. HCF helps in simplifying fractions. _____
 4. $\frac{15}{45} = \frac{1}{3}$. _____
 5. All fractions can be reduced. _____
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SECTION D – Short Answer Questions 3 Marks Each

1. Reduce $\frac{20}{28}$ to lowest form using HCF.
 2. Simplify $\frac{36}{48}$.
 3. Reduce $\frac{42}{70}$ using prime factorisation.
 4. Simplify $\frac{18}{27}$.
 5. Reduce $\frac{50}{75}$ using stepwise cancellation.
 6. Simplify $\frac{32}{40}$.
 7. Reduce $\frac{63}{81}$.
 8. Simplify $\frac{72}{96}$.
 9. Reduce $\frac{24}{60}$.
 10. Write two fractions equivalent to $\frac{3}{5}$.
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SECTION E – Word Problems

1. A ribbon of length $\frac{24}{36}$ metre is simplified for measurement. Find its simplest form.
2. A recipe needs $\frac{15}{25}$ litre milk. Reduce the fraction to lowest form.
3. Rahul scored $\frac{18}{30}$ marks in a test. Write the fraction in simplest form.
4. A tank is filled up to $\frac{42}{56}$ of its capacity. Simplify the fraction.
5. A pizza was eaten up to $\frac{20}{50}$. Reduce the fraction.
6. Simplify the fraction $\frac{36}{60}$ using HCF.

7. A rope measuring $\frac{54}{72}$ metres was shortened. Write in lowest terms.
 8. Reduce $\frac{45}{90}$ to simplest form.
 9. Simplify $\frac{81}{108}$.
 10. A student completed $\frac{16}{24}$ of homework. Write the fraction in simplest form.
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ANSWERS WITH SOLUTIONS**SECTION A – Answers**

1. c
 2. b
 3. b
 4. a
 5. d
 6. a
 7. b
 8. a
 9. c
 10. b
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SECTION B – Answers

1. $\frac{3}{4}$
 2. 8
 3. 1
 4. $\frac{3}{4}$
 5. 2 and 3
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SECTION C – Answers

1. False
 2. True
 3. True
 4. True
 5. False
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SECTION D – Solutions

1. 20/28

HCF = 4

$$20 \div 4 = 5, 28 \div 4 = 7$$

Answer = 5/7

2. 36/48

HCF = 12

$$36 \div 12 = 3, 48 \div 12 = 4$$

Answer = 3/4

3. 42/70

$$42 = 2 \times 3 \times 7$$

$$70 = 2 \times 5 \times 7$$

Cancel common factors 2 and 7

Answer = 3/5

4. 18/27

HCF = 9

$$18 \div 9 = 2, 27 \div 9 = 3$$

Answer = 2/3

5. 50/75

Stepwise cancellation:

$$50/75 \rightarrow 10/15 \rightarrow 2/3$$

Answer = 2/3

6. 32/40

HCF = 8

$$32 \div 8 = 4, 40 \div 8 = 5$$

Answer = 4/5

7. $\frac{63}{81}$

HCF = 9

$$63 \div 9 = 7, 81 \div 9 = 9$$

Answer = $\frac{7}{9}$

8. $\frac{72}{96}$

HCF = 24

$$72 \div 24 = 3, 96 \div 24 = 4$$

Answer = $\frac{3}{4}$

9. $\frac{24}{60}$

HCF = 12

$$24 \div 12 = 2, 60 \div 12 = 5$$

Answer = $\frac{2}{5}$

10. Examples:

$\frac{6}{10}, \frac{9}{15}$
