Rosary School \ Marj Elhamam

Name: Answer Key

Date : / 11/ 2025

Subject: Practice worksheet 5 / Unit 4

Grade : 6 ( )

Fractions

4.1 working with fractions

Q1. Work out the highest common factor of.

a. 18 and 27

18: 1, 2, 3, 6, 9, 18

27: 1, 3, 9, 27

HCF = 9

b. 14 and 21

14: 1, 2, 7, 14

21: 1, 3, 7, 21

HCF = 7

Q2. Write >, < in the box to make the statement correct.

a. $\frac{7}{9}$ [>] $\frac{6}{9}$

b. $\frac{4 \times 4}{4 \times 5}$ [>] $\frac{3 \times 5}{4 \times 5}$

c. $\frac{11}{12}$ [>] $\frac{5 \times 2}{6 \times 2}$

Q3. Out of 30 books, 12 are science books.
What fraction of the books are science books?
Write in simplest form.

$\frac{12 \div 6}{30 \div 6} = \boxed{\frac{2}{5}}$

Q4. A football team has 22 players. 5 of them are goalkeepers.
What fraction of the players are **not** goalkeepers?

22 - 5 = 17

$\frac{17}{22}$

4.2 Adding and subtracting fractions

Q1. Work out the lowest common multiple.

a. 6 and 9

6: 6, 12, 18, 24, 30, 36

9: 9, 18, 27, 36

LCM= 36

b. 4 and 10

4, 8, 12, 16, 20, 24, 28, 32, (40)

10, 20, 30, (40)

LCM= 40

Q2. Write these improper fractions as mixed numbers.

a. $\frac{11}{4} = 2\frac{3}{4}$ b. $\frac{19}{6} = 3\frac{1}{6}$ c. $\frac{20}{8} = 2\frac{4}{8} = 2\frac{1}{2}$

Q3. Work out

a. $1\frac{1}{4} - \frac{3}{8} =$

$\frac{2 \times 5}{2 \times 4} - \frac{3}{8} =$

$\frac{10}{8} - \frac{3}{8} = \frac{7}{8}$

b. $\frac{2^{\times 2}}{5_{\times 2}} + \frac{3}{10} =$

$\frac{4}{10} + \frac{3}{10} = \frac{7}{10}$

Q4. A mechanic stacks a plastic panel that is $9\frac{1}{2}$ cm thick on top of a foam layer that is $3\frac{3}{4}$ cm thick.

What is the total thickness of the two layers?

$9\frac{1}{2} + 3\frac{3}{4}$

$\frac{2 \times 19}{2 \times 2} + \frac{15}{4} = \frac{38}{4} + \frac{15}{4}$

$= \frac{53}{4} = 13\frac{1}{4}$ cm

4.3 Fractions, decimals and percentages.

Q1. Complete the table.

Write each fraction in its simplest form.

Fraction	Decimal	Percentage
$\frac{1 \times 2}{5 \times 2}$	0.2	20%
$\frac{55}{100} = \frac{11}{20}$	0.55	55%
$\frac{42}{100} = \frac{21}{50}$	0.42	42%

Q2. Write these fractions as decimals.

a. $\frac{2}{20} \times \frac{5}{5} = \frac{10}{100} = 0.10$

c. $\frac{4}{5} \times \frac{2}{2} = \frac{8}{10} = 0.8$

b. $\frac{3}{8} \times \frac{125}{125} = \frac{375}{1000} = 0.375$

d. $\frac{5}{25} \times \frac{4}{4} = \frac{20}{100} = 0.20$

❖ Rule is:

hours → minutes: multiply by 60.

minutes → hours: divided by 60.

Q3. Draw a ring around the numbers that give the same time intervals.

0.5 hour	$\frac{1}{6}$ hour
$\frac{1}{4}$ hour	30 minutes
25 minutes	0.25 hour

Q4. Write the missing numbers.

a. $\frac{4 \times 6}{4 \times 25} =$ 24 %

b. $\frac{4 \times 15}{4 \times 25} =$ 60 %

c. 40 % = 0.4

4.4 Multiplying by a fraction.

Q1. Work out+

a. $\frac{3}{\cancel{5}_{1}} \times \cancel{45}^{9} =$ 27

b. $4 \times \frac{2}{3} = \frac{8}{3} = 2\frac{2}{3}$

c. $\cancel{16}^{2} \times \frac{5}{\cancel{8}_{1}} =$ 10

d. $5 \times \frac{4}{7} = \frac{20}{7} = 2\frac{6}{7}$

Q2. A recipe uses $\frac{3}{4}$ cup of milk. Sara makes 3 batches.
How much milk does she need?

$3 \times \frac{3}{4} = \frac{9}{4} = 2\frac{1}{4}$

$2\frac{1}{4}$ cups

Q3. The garden is 12 m long and 6 m wide.

Hana plants flowers in $\frac{1}{3}$ of the garden.

What area is planted?

$12 \times 6 = 72\ m^2$

$72 \times \frac{1}{3} = 24\ m^2$

24 m^2

Q4. A water tank holds 180 *l*.

$\frac{1}{5}$ of it is used.

How many liters are used?

$180 \times \frac{1}{5} = 36$

36 *l*

Q5. A box has 48 kg of rice. $\frac{3}{4}$ of it is sold.

How much rice was sold?

$\overset{12}{\cancel{48}} \times \frac{3}{\cancel{4}_{1}} = 36$

36 kg

4.5 Working with mixed numbers.

Q1. Work out:

a. $3\frac{1}{4}+2\frac{1}{2}=$

$\frac{13}{4}+\frac{5\times2}{2\times2}=$

$\frac{13}{4}+\frac{10}{4}=\frac{23}{4}$

$=\boxed{5\frac{3}{4}}$

b. $6\frac{2}{3}-1\frac{1}{6}=$

$\frac{2\times20}{2\times3}-\frac{7}{6}=$

$\frac{40}{6}-\frac{7}{6}=\frac{33}{6}=5\frac{3}{6}=\boxed{5\frac{1}{2}}$

c. $4\frac{5}{8}+3\frac{3}{4}=$

$\frac{37}{8}+\frac{15\times2}{4\times2}=$

$\frac{37}{8}+\frac{30}{8}=$

$\frac{67}{8}=\boxed{8\frac{3}{8}}$

d. $7\frac{1}{5}-2\frac{2}{5}=$

$\frac{36}{5}-\frac{12}{5}=$

$\frac{24}{5}=$

$\boxed{4\frac{4}{5}}$

Q2. A pipe is $12\frac{1}{2}$ m long. A plumber cuts off $4\frac{3}{4}$ m.

How much is left?

$12\frac{1}{2}-4\frac{3}{4}=$

$\frac{2\times25}{2\times2}-\frac{19}{4}=$

$\frac{50}{4}-\frac{19}{4}=$

$\frac{31}{4}=7\frac{3}{4}$

$7\frac{3}{4}$ metres

Q3. Lana jogs $1\frac{3}{5}$ km each morning. How far in 6 days?

$1\frac{3}{5} \times 6 =$

$\frac{8}{5} \times 6 =$

$\frac{48}{5} = 9\frac{3}{5}$

$9\frac{3}{5}$ km

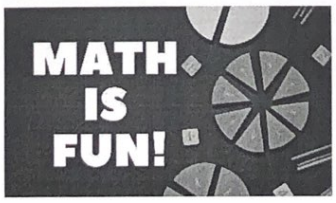
Q4. A recipe needs $1\frac{2}{3}$ cups of oil per cake.
How much oil is needed for 3 cakes?

$1\frac{2}{3} \times 3 =$

$\frac{5}{3} \times 3 =$

$\frac{15}{3} = 5$

5 Cups



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