

Worksheet 3 |

Lower Secondary

Word problems

stage (6-8)

1st Semester | 2023-2024

Subject: Math

Chapter: 6

Objectives:

To solve various word problems.

Solve the questions below:

1. There were $24\frac{5}{6}$ kg of tomatoes in the barn $7\frac{2}{5}$ kg of tomatoes were rotten and had to be thrown out. How many kilograms of tomatoes were left?

$$24\frac{5 \times 5}{6 \times 5} - 7\frac{2 \times 6}{5 \times 6}$$

$$24\frac{25}{30} - 7\frac{12}{30} = \boxed{17\frac{13}{30} \text{ Kg}}$$

2. The product of two numbers is $7\frac{1}{5}$. If one of them is $2\frac{1}{7}$, find the other number.

$$7\frac{1}{5} \div 2\frac{1}{7} = \frac{36}{5} \div \frac{15}{7}$$

$$= \frac{36}{5} \times \frac{7}{15} = \frac{84}{25} = \boxed{3\frac{9}{25}}$$

3. If it takes $2\frac{1}{12}$ meters of fabric to make a dress, then how many meters will it take to make 9 dresses?

$$9 \times 2\frac{1}{12}$$

$$3 \times \frac{25}{4} = \frac{75}{4} = \boxed{18\frac{3}{4} \text{ meters}}$$

4. Josh was packing to move to another office. He packed $3\frac{2}{5}$ boxes on Tuesday and $2\frac{9}{10}$ boxes on Wednesday. After everything was moved to his new office on Wednesday afternoon, he should have $6\frac{11}{20}$ boxes. How many boxes were missing?

step 1 $3\frac{2 \times 2}{5 \times 2} + 2\frac{9}{10}$
 $3\frac{4}{10} + 2\frac{9}{10} = 5\frac{13}{10} = 6\frac{3}{10}$

step 2 $6\frac{11}{20} - 6\frac{3 \times 2}{10 \times 2}$
 $6\frac{11}{20} - 6\frac{6}{20} = \frac{5 \div 5}{20 \div 5} = \boxed{\frac{1}{4} \text{ box}}$

5. Adam had a meeting on Wednesday for $2\frac{7}{12}$ hours, which is $1\frac{1}{8}$ hour longer than scheduled. How much time was scheduled for the meeting?

$2\frac{7 \times 2}{12 \times 2} - 1\frac{1 \times 3}{8 \times 3}$
 $2\frac{14}{24} - 1\frac{3}{24} = \boxed{1\frac{11}{24} \text{ hour}}$

6. Salma needed to write 12 documents during the week. By Wednesday, she only finished $3\frac{1}{5}$ documents. On Thursday, she finished another $5\frac{5}{6}$ documents. If she finished writing all documents by Friday, how much did she write on Friday?

step 1 $3\frac{1 \times 6}{5 \times 6} + 5\frac{5 \times 5}{6 \times 5} = 3\frac{6}{30} + 5\frac{25}{30} = 8\frac{31}{30} = 9\frac{1}{30}$

step 2 $12 - 9\frac{1}{30} = 11\frac{30}{30} - 9\frac{1}{30}$
 $= \boxed{2\frac{29}{30} \text{ documents}}$

7. David bought $5\frac{9}{10}$ kg of sugar and consumed it in 45 days. How much did he consume each day?

$$5\frac{9}{10} \div 45$$

$$\frac{59}{10} \div 45 = \frac{59}{10} \times \frac{1}{45} = \frac{59}{450} \text{ kg each day}$$

8. Amy has 72 sweets in a bag. She keeps $\frac{5}{9}$ of them for herself and shares the rest with friends. How many sweets will she give to her friends?

$$\text{Amy Kept} \Rightarrow \frac{5}{9} \times \frac{72}{1} = 40 \text{ sweets}$$

$$\text{she gave her friends} \Rightarrow 72 - 40 = 32 \text{ sweets}$$

9. Sheila is baking a few cakes for the bake sale for her school. Each cake requires $2\frac{1}{2}$ cups of sugar. How many cakes can she bake if she has $7\frac{1}{3}$ cups of sugar?

$$7\frac{1}{3} \div 2\frac{1}{2}$$

$$\frac{22}{3} \div \frac{5}{2} = \frac{22}{3} \times \frac{2}{5} = \frac{44}{15} = 2\frac{14}{15} \text{ cakes}$$

10. Julian ran $5\frac{7}{15}$ miles for 3 days in a row. How far did Julian run over those 3 days?

$$3 \times 5\frac{7}{15} = \overset{1}{\cancel{3}} \times \frac{82}{\cancel{15}5} = \frac{82}{5}$$
$$= \boxed{16\frac{2}{5} \text{ miles}}$$

11. Sophia has 20 multiple choice questions to answer in $30\frac{1}{2}$ minutes. How many minutes does she have for each question?

$$30\frac{1}{2} \div 20$$

$$\frac{61}{20} \times \frac{1}{20} = \frac{61}{40} = \boxed{1\frac{21}{40} \text{ minutes}}$$

12. Zaid sleeps $8\frac{11}{24}$ hours every night. How many hours will he sleep in 8 nights?

$$\overset{1}{\cancel{8}} \times \frac{203}{\cancel{24}3} = \frac{203}{3} = \boxed{67\frac{2}{3} \text{ hours}}$$