

Year 5 Term 1 Homework

Student Name: _____	Grade: _____
Date: _____	Score: _____

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9 Year 5 Term 1 Week 9 Homework

9.1 Topic 1 — Percentages

Exercise 9.1.1 Evaluate the following:

1. 12.5% of $\$800 =$ _____

2. 125% of $\$80 =$ _____

3. 0.125% of $\$8,000 =$ _____

Exercise 9.1.2 Evaluate the following:

1. *If 160% of a number is 240, find the number.*

2. *If 22.5% of a number is 432, find the number.*

3. *If 1.2% of a number is 84, find the number.*

Exercise 9.1.3

1. *Alice gave 60% of her salary to her parents. She spent 20% of it and saved the remaining $\$200$. How much did she give to her parents?*

2. *20% of the spectators at a football match are women. 15% are girls, 35% are boys and the remaining 3600 spectators are men. Find the total number of spectators at the football match.*

9.2 Topic 2 — Fractions and Ratio**Exercise 9.2.1 Solve the following problems:**

1. Mary originally had \$60 and spent $\frac{1}{5}$ at McDonalds and $\frac{1}{3}$ on books. How much money did she have left?

2. What is the difference between $6\frac{3}{5}$ and the sum of $1\frac{1}{3}$ and $2\frac{1}{4}$?

3. Bob had \$25.20 less than Tom. Bob spent $\frac{4}{7}$ of his money on a pen which cost \$2.80. Tom spent $\frac{3}{7}$ of his money on a watch. How much did Tom have left?

4. Emma made an apple drink by mixing apple syrup and water in the ratio 3:9. If she used 3.6 litres more water than syrup, how much drink did she make?

5. George and Sam share a total of \$132 in a ratio of 3 : 8. How much does each boy have?

9.3 Topic 3 — Order of Operations

Exercise 9.3.1 Evaluate the following:

1. $12 \times 4 \div 3 - 12 \div 4 \times 3 =$

2. $12 \div 4 \times 3 + 12 \times 4 \div 3 =$

3. $(12 + 4) \div (12 - 4) \times 8 \div 2 =$

4. $8 \times 3 - (12 \div 4 - 2) =$

5. $\frac{1}{4} \times \frac{2}{3} - \frac{1}{6} =$

6. $12.8 \div 0.4 \times 5 - (12.8 \div 0.4 - 5) =$

7. *4 times the square of 3 is increased by the difference of 6 and 3.*

8. *The product of 7 and 9 is decreased by the quotient of 18 and 6.*

9.4 Topic 4 — Problem Solving (Ratio)**Exercise 9.4.1**

1. The ratio of Sam's money to Ken's money is 3:9. Sam has \$48 less than Ken. How much does each boy have?

2. The ratio of the number of apples to the number of oranges to the number of pears at a fruit stall is 3 : 4 : 5 . The total number of fruit is 3000.

(a) How many fruits of each kind are there?

(b) How many more pears than apples are there?

(c) Orange are sold at 5 for \$2. How much can the fruit seller collect from the sale of all his oranges?

3. Alice, Emma and Amy shared a number of marbles in the ratio of 8 : 6 : 4. Alice and Emma received a total of 490 marbles.

(a) How many marbles did Alice receive?

(b) How many more marbles did Emma receive than Amy?

9.5 Test Paper 9**9.5.1 Part A — Multiple Choice Questions**

1. $1 \div 2 + 1 \div 3 + 1 \div 4 =$
(A) 1 (B) $1\frac{1}{6}$ (C) $1\frac{1}{12}$ (D) $\frac{1}{48}$
2. $7 \times 8 - (16 - 6 \div 6) =$
(A) 41 (B) 37 (C) 51 (D) 23
3. $96 - [(15 \div 3) - (45 \div 15)] \times 10 + 4 =$
(A) 884 (B) 68 (C) 944 (D) 80
4. The product of 6 and 9 is decreased by the quotient of 6 and 3.
(A) 52 (B) 36 (C) 56 (D) 16
5. 4 times the square of 3 is increased by the difference of 9 and 2.
(A) 88 (B) 29 (C) 19 (D) 43
6. Increase 16.82 by 4.79 and subtract the result from 25.
(A) 3.39 (B) 11.97 (C) 12.97 (D) 4.39
7. Decrease the product of $\frac{3}{10}$ and $\frac{4}{5}$ by $\frac{1}{20}$.
(A) $1\frac{1}{20}$ (B) $\frac{19}{100}$ (C) $\frac{29}{100}$ (D) $\frac{51}{200}$
8. Find the average of 13.96, 23.25, 18.38 and 20.29
(A) 19.22 (B) 15.176 (C) 18.97 (D) 18.72
9. Find the average of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$ and $\frac{1}{16}$
(A) $\frac{3}{16}$ (B) $\frac{15}{16}$ (C) $\frac{7}{32}$ (D) $\frac{15}{64}$
10. Use a quick method to find $18 \times 13 - 9 \times 13 + 11 \times 13$
(A) 260 (B) 250 (C) 247 (D) 270
11. Use a quick method to find $563 + 327 + 282 - 263 - 127 + 18$
(A) 800 (B) 764 (C) 700 (D) 790
12. If $P \diamond Q = \frac{p-q}{p \times q}$, $8 \diamond 7 =$
(A) $\frac{1}{65}$ (B) $\frac{15}{56}$ (C) $\frac{1}{56}$ (D) 56

9.5.2 Part B — Average Questions

- Find 35 seconds as a fraction of a minute.
(A) $\frac{7}{12}$ (B) $\frac{7}{20}$ (C) $\frac{15}{20}$ (D) $\frac{5}{12}$
- What is the smallest number with a remainder of 3 when 75 is divided and a remainder of 7 when 115 is divided?
(A) 14 (B) 15 (C) 16 (D) 18
- What is the smaller angle between East and North-West?
(A) 315° (B) 135° (C) 225° (D) 45°
- Find the number which is halfway between 23.5 and 12.3.
(A) 15.6 (B) 15.8 (C) 17.9 (D) 18
- Decrease the quotient of 18 and 3 by 3.
(A) 3 (B) 4 (C) 5 (D) 6
- Find the value of $0.036 \times 10,000$.
(A) 36 (B) 360 (C) 3,600 (D) 36,000
- What is the difference between $2\frac{1}{12}$ and $3\frac{1}{3}$.
(A) $1\frac{1}{4}$ (B) $5\frac{1}{3}$ (C) $1\frac{1}{6}$ (D) $1\frac{1}{3}$
- 4 times the square of 4 is increased by the difference of 9 and 5.
(A) 68 (B) 78 (C) 64 (D) 54
- If $\frac{2}{5}$ of a number is 42, what is the number?
(A) 84 (B) 105 (C) 108 (D) 95
- Find the missing number in this expression $200 - (20 + \boxed{?}) \times \boxed{?} = 44$.
(A) 5 (B) 6 (C) 7 (D) 8

9.5.3 Part C — Extension Questions

1. A rectangle has an area of 126 cm^2 . Find the length if the breadth is 11 cm less than the length.

2. If $\frac{1}{4}$ of a pole is below the ground and 18 m is above the ground, what is the length of the pole?

3. Find the value of $1 \div 2 \times 3 \div 4 \times 5 \div 6$.

4. The average of three numbers is 8. A fourth number is added and the new average is 9. What is the fourth number?

5. I think of a number, square it, halve it, triple it and I am left with 96. What was the number that I first thought of?

6. Find the LCM of 36, 56 and 126.

7. Find the HCF of 27 and 36.

8. Find the sum of all the factors of 36.

9.5.4 Part D — Challenging Problems

1. When a number is divided by 12 or 15, the remainder is 3. Find the smallest number.

2. 55% of fruits at a stall are apples. The rest are oranges and the pears in the ratio of 4:5. There are 750 more apples than pears. How many fruits are there at the stall altogether?

3. Peter had \$1.20 more than Ray. Peter spent $\frac{7}{8}$ of his money on a pencil case which cost \$2.80. Ray spent $\frac{1}{2}$ of his money on an eraser. How much money did Ray have left?

4. John saved half his weekly wage and spent $\frac{1}{5}$ of his weekly wage on groceries. If he has \$110.25 left over, what is his weekly wage?

5. Find half the difference between $1\frac{1}{3}$ and $2\frac{1}{4}$.
