

## Year 4 Term 1 Homework

<b>Student Name:</b> _____	<b>Grade:</b> _____
<b>Date:</b> _____	<b>Score:</b> _____

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## 9 Year 4 Term 1 Week 9 Homework

### 9.1 Percentages

**Exercise 9.1.1** Find the value of the following:

1.  $50\%$  of  $\$200 =$  \_\_\_\_\_

2.  $20\%$  of  $\$150 =$  \_\_\_\_\_

3.  $10\%$  of  $\$80 =$  \_\_\_\_\_

4.  $5\%$  of  $\$100 =$  \_\_\_\_\_

5.  $100\%$  of  $\$150 =$  \_\_\_\_\_

**Exercise 9.1.2** Change the following fractions to percentages.

1.  $\frac{50}{100} =$  \_\_\_\_\_

2.  $\frac{10}{20} =$  \_\_\_\_\_

3.  $\frac{10}{50} =$  \_\_\_\_\_

4.  $\frac{20}{50} =$  \_\_\_\_\_

5.  $\frac{25}{50} =$  \_\_\_\_\_

**Exercise 9.1.3** Change the following decimals to percentages.

1.  $0.25 =$  \_\_\_\_\_

2.  $0.85 =$  \_\_\_\_\_

3.  $0.5 =$  \_\_\_\_\_

4.  $0.2 =$  \_\_\_\_\_

5.  $0.15 =$  \_\_\_\_\_

## 9.2 Fractions

### 9.2.1 Adding Fractions

$$\textcircled{1} \quad \frac{1}{4} + \frac{5}{10} = \underline{\hspace{10cm}}$$

$$\textcircled{2} \quad 1\frac{1}{2} + 1\frac{5}{6} = \underline{\hspace{10cm}}$$

$$\textcircled{3} \quad \frac{1}{3} + 1\frac{3}{6} = \underline{\hspace{10cm}}$$

$$\textcircled{4} \quad 1\frac{3}{4} + 1\frac{1}{2} = \underline{\hspace{10cm}}$$

$$\textcircled{5} \quad 1\frac{4}{8} + \frac{3}{4} = \underline{\hspace{10cm}}$$

$$\textcircled{6} \quad \frac{4}{7} + \frac{2}{4} = \underline{\hspace{10cm}}$$

$$\textcircled{7} \quad 1\frac{2}{6} + 1\frac{7}{10} = \underline{\hspace{10cm}}$$

$$\textcircled{8} \quad \frac{3}{10} + 1\frac{4}{7} = \underline{\hspace{10cm}}$$

$$\textcircled{9} \quad 1\frac{3}{7} + \frac{6}{8} = \underline{\hspace{10cm}}$$

$$\textcircled{10} \quad 1\frac{9}{10} + \frac{1}{3} = \underline{\hspace{10cm}}$$

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Score: \_\_\_\_\_

**9.2.2 Subtracting Fractions**

$$\textcircled{1} \quad \frac{4}{11} - \frac{4}{12} = \underline{\hspace{10cm}}$$

$$\textcircled{2} \quad 1\frac{5}{6} - \frac{1}{7} = \underline{\hspace{10cm}}$$

$$\textcircled{3} \quad 1\frac{6}{7} - \frac{3}{7} = \underline{\hspace{10cm}}$$

$$\textcircled{4} \quad \frac{8}{9} - \frac{1}{5} = \underline{\hspace{10cm}}$$

$$\textcircled{5} \quad 1\frac{1}{3} - \frac{1}{11} = \underline{\hspace{10cm}}$$

$$\textcircled{6} \quad 1\frac{2}{6} - 1\frac{2}{7} = \underline{\hspace{10cm}}$$

$$\textcircled{7} \quad 1\frac{1}{5} - \frac{1}{4} = \underline{\hspace{10cm}}$$

$$\textcircled{8} \quad \frac{5}{8} - \frac{5}{9} = \underline{\hspace{10cm}}$$

$$\textcircled{9} \quad 1\frac{4}{6} - \frac{4}{11} = \underline{\hspace{10cm}}$$

$$\textcircled{10} \quad \frac{6}{8} - \frac{8}{11} = \underline{\hspace{10cm}}$$

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Score: \_\_\_\_\_

**9.2.3 Multiplying Fractions**

$$\textcircled{1} \quad 1\frac{3}{4} \times \frac{3}{4} = \underline{\hspace{10cm}}$$

$$\textcircled{2} \quad \frac{1}{2} \times 1\frac{1}{2} = \underline{\hspace{10cm}}$$

$$\textcircled{3} \quad 1\frac{3}{6} \times \frac{2}{6} = \underline{\hspace{10cm}}$$

$$\textcircled{4} \quad \frac{5}{6} \times 1\frac{2}{5} = \underline{\hspace{10cm}}$$

$$\textcircled{5} \quad 1\frac{1}{4} \times \frac{1}{4} = \underline{\hspace{10cm}}$$

$$\textcircled{6} \quad 1\frac{2}{4} \times \frac{3}{6} = \underline{\hspace{10cm}}$$

$$\textcircled{7} \quad \frac{2}{3} \times \frac{5}{6} = \underline{\hspace{10cm}}$$

$$\textcircled{8} \quad \frac{3}{5} \times 1\frac{2}{3} = \underline{\hspace{10cm}}$$

$$\textcircled{9} \quad \frac{4}{5} \times 1\frac{1}{6} = \underline{\hspace{10cm}}$$

$$\textcircled{10} \quad 1\frac{1}{3} \times 1\frac{4}{6} = \underline{\hspace{10cm}}$$

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Score: \_\_\_\_\_

**9.2.4 Dividing Fractions**

$$\textcircled{1} \quad \frac{1}{4} \div 1\frac{3}{6} = \underline{\hspace{10cm}}$$

$$\textcircled{2} \quad 1\frac{3}{4} \div \frac{1}{2} = \underline{\hspace{10cm}}$$

$$\textcircled{3} \quad 1\frac{2}{4} \div \frac{5}{6} = \underline{\hspace{10cm}}$$

$$\textcircled{4} \quad 1\frac{2}{6} \div \frac{1}{3} = \underline{\hspace{10cm}}$$

$$\textcircled{5} \quad \frac{1}{2} \div 1\frac{4}{5} = \underline{\hspace{10cm}}$$

$$\textcircled{6} \quad \frac{2}{5} \div 1\frac{1}{6} = \underline{\hspace{10cm}}$$

$$\textcircled{7} \quad 1\frac{2}{3} \div \frac{2}{3} = \underline{\hspace{10cm}}$$

$$\textcircled{8} \quad 1\frac{5}{6} \div \frac{1}{4} = \underline{\hspace{10cm}}$$

$$\textcircled{9} \quad 1\frac{1}{3} \div \frac{3}{4} = \underline{\hspace{10cm}}$$

$$\textcircled{10} \quad 1\frac{4}{5} \div 1\frac{1}{5} = \underline{\hspace{10cm}}$$

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Score:

### 9.3 Problem Solving

#### Exercise 9.3.1 Solve the following percentage problems:

1. There are 500 students in a school. If 40% of them are boys, how many boys and girls are there in the school?

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2. There are 50 marbles in a box. If there are 20% of the marbles are green. How many green marbles are there?

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3. If 10% of the students in Year 4 were absent, what percentage were present?

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4. If 25% of the people in a crowd are children, what percentage are adults?

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5. Approximately 80% of the human body is made up of water. How much water would a boy have if his mass is 40 kg?

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6. Ken scored 75% in his maths exam, which was marked out of 40. How many questions did he answer correctly?

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7. If 25% of the 400 sheep in a paddock were shorn on Monday, find the number of sheep that were shorn.

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## 9.4 Number Problems

**Exercise 9.4.1 Construct an equation for each of these number problems and then solve it.**

1. The quotient of a number and nine increased by 12 is 24. What is the number? \_\_\_\_\_

\_\_\_\_\_

2. One number is three times another. Their sum is 32. Find the numbers. \_\_\_\_\_

\_\_\_\_\_

3. The sum of two numbers is 14. One number is two less than the other. Find the numbers. \_\_\_\_\_

\_\_\_\_\_

4. One of two numbers is seven more than the other. The sum of the numbers is 31. Find the numbers.

\_\_\_\_\_

5. The product of two numbers is 168. One number is two less than the other. What are the numbers?

\_\_\_\_\_

6. Seven more than three times a number is 16. What is the number? \_\_\_\_\_

\_\_\_\_\_

7. One less than five times a number is 59. Find the number. \_\_\_\_\_

\_\_\_\_\_

8. The sum of two numbers is 88. The large number is seven times the smaller number. What are the numbers? \_\_\_\_\_

\_\_\_\_\_

9. Three times a number increased by 6 is 21. Find the number. \_\_\_\_\_

\_\_\_\_\_

10. Five times a number equals 36 less than eight times the number. What is the number?

\_\_\_\_\_

\_\_\_\_\_



**9.5 Quiz 9**

Question 1. ....(5 points)

Apples are \$2.85/kg. How much would 4 kg cost?

- A. \$10.80                      B. \$11.40                      C. \$12.60                      D. \$13.80

Question 2. ....(5 points)

25% of \$400 is:

- A. \$100                      B. \$200                      C. \$250                      D. \$80

Question 3. ....(5 points)

The value of  $15 \times 2 + 5 \times 1.2$  is:

- A. 42                      B. 36                      C. 32                      D. 48

Question 4. ....(5 points)

If 45% of children in a class are boys, what percentage are girls?

- A. 45%                      B. 50%                      C. 55%                      D. 65%

Question 5. ....(5 points)

6 times a number increased by 12 is 60. What is the number?

- A. 6                      B. 7                      C. 8                      D. 12

Question 6. ....(5 points)

What digit should be placed in the box so that the number  $2\boxed{?}4$  is divisible by 9?

- A. 1                      B. 2                      C. 3                      D. 4

Question 7. ....(5 points)

There are 50 black and white marbles in a box. If 30% of the marbles are black, how many marbles are white?

- A. 15                      B. 25                      C. 35                      D. 40

Question 8. ....(5 points)

The product of 3 consecutive odd numbers is 693. The largest of these numbers must be:

- A. 7                      B. 9                      C. 11                      D. 13

Question 9. ....(5 points)

Tony is given \$20 as pocket money each week and spends 50% of it. How much does he save over 52 weeks?

- A. \$52                      B. \$120                      C. \$250                      D. \$520

Question 10. ....(5 points)

The average of 5 numbers is 8. If the first four numbers are 5, 6, 8 and 12, what is the fifth number?

- A. 6                      B. 7                      C. 8                      D. 9

Question 11. ....(5 points)

The most likely number needed to complete the series 2, 3, 5, 9, .... is:

- A. 17                      B. 19                      C. 15                      D. 13

Question 12. ....(5 points)

A puppy dog has been alive for 100,000 seconds. How long is this approximately?

- A. 1 week                      B. 1 day                      C. 1 month                      D. 5 hours

Question 13. ....(5 points)

Find the lowest common multiple of 4, 6, and 12.

- A. 24                      B. 12                      C. 36                      D. 48

Question 14. .... (5 points)

Find the lowest common multiple of 4, 8 and 12.

- A. 24                      B. 12                      C. 32                      D. 48

Question 15. .... (5 points)

50% of my salary is \$250. How much would my salary be?

- A. \$125                      B. \$500                      C. \$250                      D. \$1000

Question 16. .... (5 points)

Change 1.2 km to metres.

- A. 1200 m                      B. 120 m                      C. 12000 m                      D. 12 m

Question 17. .... (5 points)

If 50% of my backyard is lawn and 25% of it is garden, what percentage of it must be path?

- A. 10%                      B. 15%                      C. 20%                      D. 25%

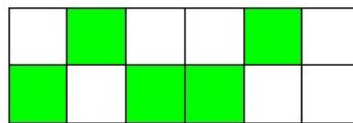
Question 18. .... (5 points)

If 3 kg of jelly beans cost \$12, what would 2 kg of jelly beans cost?

- A. \$24                      B. \$9                      C. \$8                      D. \$6

Question 19. .... (5 points)

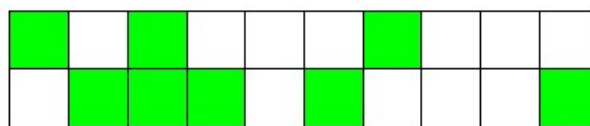
What fraction of the figure has been shaded?



- A.  $\frac{1}{2}$                       B.  $\frac{3}{5}$                       C.  $\frac{5}{8}$                       D.  $\frac{5}{12}$

Question 20. .... (5 points)

What percentage of the figure has been shaded?



- A. 30%                      B. 40%                      C. 35%                      D. 25%