Primary 6 Maths Worksheets

Primary 6 · Mathematics

The Singapore Syllabus

1 Fractions: division

Name: _____ **Date:** _____ **Score:** ____ / 10

Syllabus: Dividing a proper fraction by a whole number, and dividing a whole number or a proper fraction by a proper fraction.

Give each answer in its simplest form.

1. $\frac{2}{3} \div 4 =$ ____
2. $\frac{5}{8} \div 5 =$ ____
3. $6 \div \frac{1}{3} =$ ____
4. $4 \div \frac{2}{5} =$ ____
5. $\frac{3}{4} \div \frac{1}{8} =$ ____
6. $\frac{5}{6} \div \frac{2}{3} =$ ____
7. $\frac{4}{9} \div \frac{8}{15} =$ ____
8. $\frac{3}{5}$ ℓ of juice is poured equally into 6 cups. How much juice is in each cup?

   Answer: _____
9. A ribbon 8 m long is cut into pieces. Each piece is $\frac{2}{3}$ m long. How many pieces are there?

   Answer: _____
10. Mrs Goh has $\frac{3}{4}$ kg of flour. Each cake needs $\frac{3}{16}$ kg of flour. How many cakes can she bake?

    Answer: _____

2 Percentage

Name: _____ **Date:** _____ **Score: ____ / 10**

Syllabus: Finding the whole from a part and its percentage, and percentage increase and decrease.

Find 1% first when you need the whole.

1. 20% of a number is 36. What is the number?

Answer: _____

2. 75% of a number is 150. What is the number?

Answer: _____

3. Devi spent 40% of her money on a bag. The bag cost $64. How much money did she have at first?

Answer: _____

4. The price of a toy rises from $50 to $60. Find the percentage increase.

Answer: _____

5. The number of pupils in a school falls from 400 to 340. Find the percentage decrease.

Answer: _____

6. After a 20% discount, a watch costs $96. What is its usual price?

Answer: _____

7. A shop raises the price of a $250 chair by 8%. What is the new price?

Answer: _____

8. 60% of the pupils in a class are girls. There are 16 boys. How many pupils are there in the class?

Answer: _____

9. Ken's mass was 50 kg last year. It is 10% more this year. What is his mass this year?

Answer: _____

10. Ali had $600. He spent 30% of it on a phone and 25% of the remainder on shoes. How much money did he have left?

Answer: _____

3 Ratio

Name: _____ **Date:** _____ **Score:** ____ / 10

Syllabus: Ratio notation, equivalent ratios, dividing a quantity in a given ratio, and the link between ratio and fraction.

Write each ratio in its simplest form.

1. Write 12 : 18 in its simplest form.

Answer: _____

2. Write 15 : 25 : 40 in its simplest form.

Answer: _____

3. Fill in the missing number: 3 : 4 = 12 : ____

4. There are 8 boys and 12 girls in a club. Find the ratio of the number of boys to the total number of children.

Answer: _____

5. The ratio of Ali's stamps to Ben's stamps is 3 : 5. Write the number of Ali's stamps as a fraction of the number of Ben's stamps.

Answer: _____

6. Mei and Jun share $120 in the ratio 3 : 5. How much does Jun get?

Answer: _____

7. The ratio of red beads to blue beads in a box is 4 : 7. There are 28 red beads. How many blue beads are there?

Answer: _____

8. The ratio of the length of a rectangle to its breadth is 5 : 2. Its perimeter is 84 cm. Find its length.

Answer: _____

9. A : B = 2 : 3 and B : C = 6 : 5. Find A : B : C.

Answer: _____

10. The ratio of Sam's money to Tom's money was 5 : 3. After Sam gave Tom $20, they had the same amount of money. How much money did Sam have at first?

Answer: _____

4 Algebra

Name: _____ **Date:** _____ **Score:** ____ / 10

Syllabus: Using a letter for an unknown number, simplifying and evaluating algebraic expressions, and solving simple equations.

4y means 4 × y.

1. Simplify 5a + 3a.

Answer: _____

2. Simplify 9b − 4b + 2b.

Answer: _____

3. Simplify 6c + 8 − 2c − 3.

Answer: _____

4. Find the value of 4y + 7 when y = 6.

Answer: _____

5. Find the value of (3k − 5) ÷ 2 when k = 9.

Answer: _____

6. A pen costs $p. A book costs $3 more than 4 pens. Write the cost of the book in terms of p.

Answer: _____

7. Mei is m years old. Her father is 4 times as old as she is. Write the sum of their ages in terms of m.

Answer: _____

8. Solve 3x + 5 = 26.

Answer: _____

9. Solve 4x − 9 = 15.

Answer: _____

10. A rectangle is (2w + 3) cm long and w cm wide. Its perimeter is 48 cm. Find the value of w.

Answer: _____

5 Area and circumference of circle

Name: _____ **Date:** _____ **Score: ____ / 10**

Syllabus: Radius and diameter, the circumference and area of a circle, and semicircles and quarter circles.

Circumference = π × diameter. Area = π × radius × radius. Use the value of π given in each question.

1. The diameter of a circle is 18 cm. What is its radius?

Answer: _____

2. Find the circumference of a circle of diameter 14 cm. Take $\pi = \frac{22}{7}$.

Answer: _____

3. Find the circumference of a circle of radius 10 cm. Take $\pi = 3.14$.

Answer: _____

4. Find the area of a circle of radius 7 cm. Take $\pi = \frac{22}{7}$.

Answer: _____

5. Find the area of a circle of diameter 20 cm. Take $\pi = 3.14$.

Answer: _____

6. Find the area of a semicircle of radius 14 cm. Take $\pi = \frac{22}{7}$.

Answer: _____

7. Find the perimeter of a semicircle of diameter 28 cm. Take $\pi = \frac{22}{7}$.

Answer: _____

8. Find the area of a quarter circle of radius 10 cm. Take $\pi = 3.14$.

Answer: _____

9. A wheel has a diameter of 70 cm. How far does it roll in 10 full turns? Take $\pi = \frac{22}{7}$. Give your answer in metres.

Answer: _____

10. A circle fits exactly inside a square of side 14 cm. Find the area of the square that is not covered by the circle. Take $\pi = \frac{22}{7}$.

Answer: _____

6 Average

Name: _____ **Date:** _____ **Score: ____ / 10**

Syllabus: Average as the total value divided by the number of data, and finding the total or a missing value from the average.

Average = total ÷ number of items. Total = average × number of items.

1. Find the average of 12, 15, 18 and 23.

Answer: _____

2. Find the average of 4.5, 6.2 and 7.3.

Answer: _____

3. The average of 5 numbers is 24. What is the sum of the 5 numbers?

Answer: _____

4. The total mass of 8 parcels is 36 kg. Find the average mass of a parcel.

Answer: _____

5. Jo scored 78, 85 and 92 marks in three tests. Find her average score.

Answer: _____

6. The average of 4 numbers is 30. Three of the numbers are 22, 35 and 28. Find the fourth number.

Answer: _____

7. The average height of 3 boys is 142 cm. A fourth boy who is 150 cm tall joins them. Find the average height of the 4 boys.

Answer: _____

8. The average of Ann's savings and Ben's savings is $65. Ann has $80. How much does Ben have?

Answer: _____

9. Ravi ran an average of 3.5 km a day for 6 days. How far did he run in all?

Answer: _____

10. The average mass of 5 boxes is 12 kg. When a sixth box is added, the average mass becomes 13 kg. Find the mass of the sixth box.

Answer: _____

A Answer key

Mark each worksheet, then go over any wrong answer together.

1. FRACTIONS: DIVISION

1. $\frac{1}{6}$
2. $\frac{1}{8}$
3. 18
4. 10
5. 6
6. $1\frac{1}{4}$
7. $\frac{5}{6}$
8. $\frac{1}{10}$ ℓ
9. 12
10. 4

2. PERCENTAGE

1. 180
2. 200
3. $160
4. 20%
5. 15%
6. $120
7. $270
8. 40
9. 55 kg
10. $315

3. RATIO

1. 2 : 3
2. 3 : 5 : 8
3. 16
4. 2 : 5
5. $\frac{3}{5}$
6. $75
7. 49
8. 30 cm
9. 4 : 6 : 5
10. $100

4. ALGEBRA

1. 8a
2. 7b
3. 4c + 5
4. 31
5. 11
6. $(4p + 3)
7. 5m years
8. x = 7
9. x = 6
10. w = 7

5. AREA AND CIRCUMFERENCE OF CIRCLE

1. 9 cm
2. 44 cm
3. 62.8 cm
4. 154 cm^2
5. 314 cm^2
6. 308 cm^2
7. 72 cm (44 cm round the curve and 28 cm along the straight side)
8. 78.5 cm^2
9. 22 m
10. 42 cm^2

6. AVERAGE

1. 17
2. 6
3. 120
4. 4.5 kg
5. 85 marks
6. 35
7. 144 cm
8. $50
9. 21 km
10. 18 kg