

REVISION SHEET FOR 2nd TERM EXAM ACADEMIC YEAR 2022-23

GRADE : 6

Subject : MATHS

(Q # 1) Choose the correct answer .

1. The pie chart shows the test grades of 30 students. Number of sectors are 10.
Number of students for each sector = _____
a) **$30 \div 3$** b) 30×3 c) 5 d) None
2. The sales of different types of coffee. Americano = 10 , Cappuccino = 8 ,
Latte = 12 , Mocha = 5 . Find the total number of coffees sold.
a) 30 b) 25 c) **35** d) 40
3. If each sector represents 3 people, then for 12 sectors = -----
a) 12 b) **36** c) 15 d) 40
4. If $x = 2$ and $y = 3$, find the value of $4y(1 + x)$
a) 33 b) 35 c) 46 d) **36**
5. The perimeter of a rectangular field is 80m. If the field's length is 30m,
what is its width?
a) **10 m** b) 50 m c) 25 m d) 30 m
6. Which of these is not a square number ?
(a) 9 (b) 196 (c) **30** (d) 16
7. Which of these numbers is not divisible by 3 ?
(a) 1122 (b) **233** (c) 234 (d) 201
8. 3.6 tonnes in kg is and 1 km 5 m =
(a) 36000 ; 105 m (c) **3600 ; 1005 m**
(b) 0.0036 ; 15 m (d) 0.36 ; 150 m
9. 42 kg of rice is divided equally among 8 people. Each person gets
A bus holds 14 people. How many buses are needed to transport 189 people ?
(a) 52.5 g ; 10 (b) **5250 g ; 14** (c) 525 g ; 12 (d) 525.25 g ; 13
10. 43 000 millilitres to litres _____ $5^2 + 6^2 =$ _____
a) 34 ; 41 b) 430 ; 11 c) 0.43 ; 11^2 d) **43 ; 61**

(Q # 2) Write True (T) or False (F).

1. A pie chart is a circle divided into sectors. [True]
2. If $x = 2$ and $y = 3$, the value of $5x - 2y$ is 12. [False]
3. The prime factors of 15 are 3 and 5 . [True]
4. The inverse of the square of a number is called its length. [False]
5. The angle of the sector shows the fraction of the total. [True]
6. A smaller unit used for capacity is millilitres. [True]
7. A prime number has more than two factors. [False]
8. Data can also be drawn as a bar-line graph. [True]
9. The solution to $17 - 2x = 7$ is $x = 10$ [False]
10. The LCM of 6 and 8 is 24. [False]

(Q # 3) Fill in the blanks.

1. A **Scale** tells you the number of items each symbol represents.
2. Bar charts are sometimes called **bar graphs** or **block graphs** .
3. If $1 \text{ m}^2 = 1\,000\,000 \text{ mm}^2$ then $2.7 \text{ m}^2 = \underline{2\,700\,000 \text{ mm}^2}$
4. If $t = 8$, $r = 3$ and $v = 2$, the value of $t + 2r = \underline{14}$
5. 0.9 litres to millilitres = **900 ml**.
6. Total mass of 555g , 2.452g and 12 g = **3.019 g**
7. Change 5.6 km in **5600** metres.
8. $\sqrt{4900} = \underline{70}$
9. A number with exactly two different factors is called a **Prime** number.
10. The SI unit of length is **metre** .

(Q # 4) Match the following.

- | | |
|---|---------------------------------|
| 1. Common factors of 12 and 30 | (A) 2 057 321 g (4) |
| 2. $\sqrt{121} + \sqrt{64}$ | (B) km, m, cm , mm (5) |
| 3. Prime numbers between 70 and 80 | (C) 1, 2, 3, 6 (1) |
| 4. $2t + 57 \text{ kg} + 321 \text{ g}$ | (D) 2, 3 and 7 (6) |
| 5. Units of length | (E) 19 (2) |
| 6. Prime factors of 84 | (F) 71 , 73 , 79 (3) |
| 7. $4ab + 7 - 2ab - 2$ | (G) Pictogram (8) |
| 8. Uses pictures or drawing to
Represent discrete data | (H) $2ab + 5$ (7) |

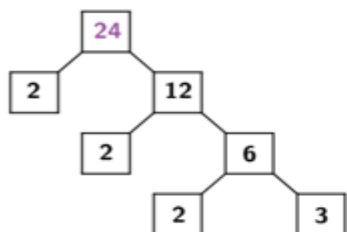
(Q # 5) Write one word for the following.

- | | |
|---|---------------------------|
| 1. It is an equation relating different quantities. | <u>Formula</u> |
| 2. The inverse of the square of a number is called . | <u>Square root</u> |
| 3. It is a statement using algebra that contains an equals sign. | <u>Equation</u> |
| 4. How many minutes are there in a day ? | <u>1440</u> |
| 5. A number which has more than two different factors. | <u>Composite</u> |
| 6. A measurement of how much matter an object has. | <u>Mass</u> |
| 7. It is a type of measurement and measures how much liquid a container can hold. | <u>Capacity</u> |
| 8. A unit of measurement used to measure large amounts of liquid or the capacity of large containers. | <u>Litre</u> |

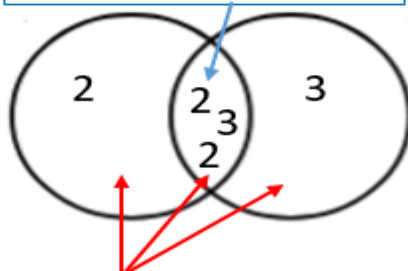
(Q # 6) Label the following.

HCF and LCM

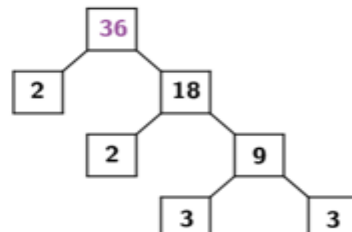
Find the HCF and LCM of 24 and 36



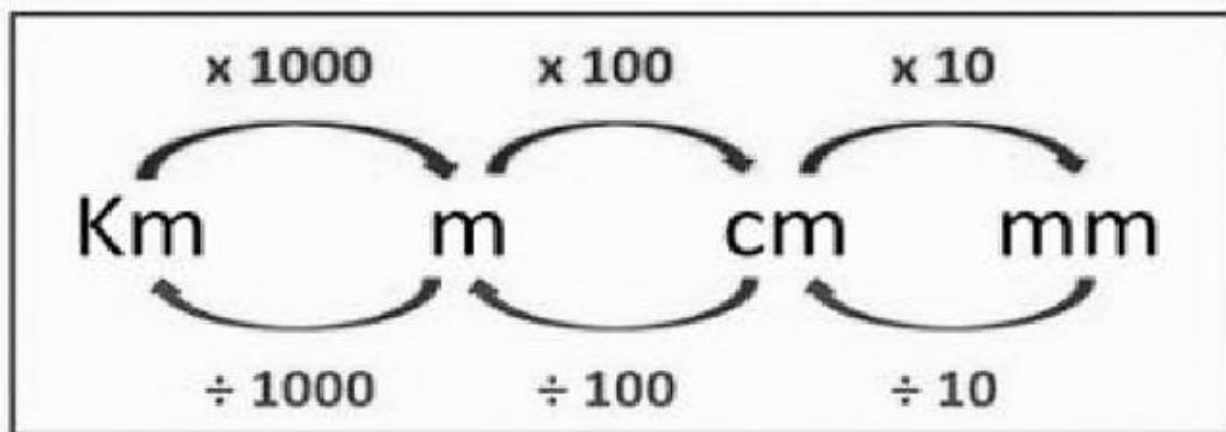
$$\text{HCF: } 2 \times 2 \times 3 = 12$$



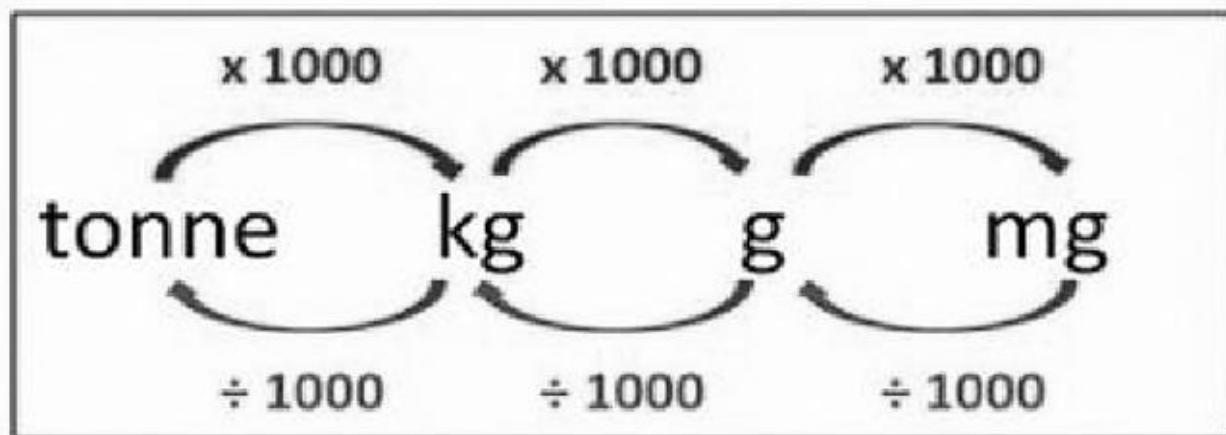
$$\text{LCM: } 2 \times 2 \times 2 \times 3 \times 3 = 72$$



a. Converting units of length



b. Converting units of mass



(Q # 7) Solve the following.

1. Solve the equation : $2(4 - y) - 3(y + 3) = -11$

Ans.

$$2(4 - y) - 3(y + 3) = -11$$

$$8 - 2y - 3y - 9 = -11$$

$$-5y - 1 = -11$$

$$-5y - 1 + 1 = -11 + 1$$

$$-5y = -10$$

$$\frac{-5y}{-5} = \frac{-10}{-5}$$

$$y = 2$$

2.

The table shows how 80 students travel to school.

Means of transport	Walk	Bus	Car	Bicycle
Number of students	40	20	10	10

Draw a pie chart to show this information.

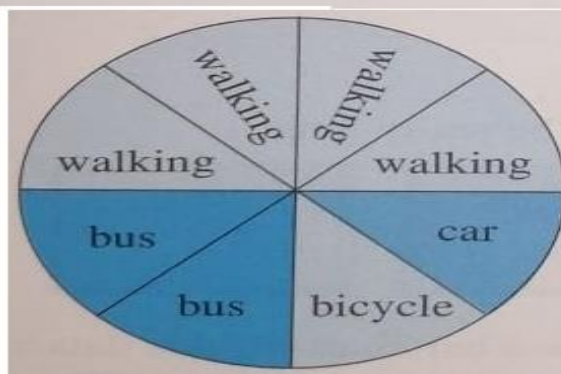
$$\text{Fraction of students walking} = \frac{40}{80} = \frac{4}{8} = \frac{1}{2}$$

Fraction of students coming by bus

$$= \frac{20}{80} = \frac{2}{8} = \frac{1}{4}$$

$$\text{Fraction of students coming by car} = \frac{10}{80} = \frac{1}{8}$$

$$\text{Fraction of students coming by bicycle} = \frac{10}{80} = \frac{1}{8}$$



3. Solve these equations.

(a)	$\frac{p}{4} + 1 = 3$
Ans	$\frac{p}{4} + 1 = 3$ $\frac{p}{4} = 3 - 1 = 2$ $\frac{p}{4} = 2$ $p = 2 \times 4 = 8$

(b)	$- 3 x = 15$
Ans	$- 3 \times x = 15$ $x = 15 / - 3 \quad [15 \div 3 = 5]$ $x = - 5$

4. Change a) 6 cm 5 mm to mm

b) 6314 m to km

Ans.

<p>a) 1 cm = 10 mm</p> <p>so 6 cm 5 mm = 6.5 cm</p> <p>$= 6.5 \times 10 \text{ mm}$</p> <p>$= 65 \text{ mm}$</p>	<p>b) 1 km = 1000 m</p> <p>so 6314 m = $6314 \div 1000 \text{ km}$</p> <p>$= 6.314 \text{ km}$</p>
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5.

Find	a	the HCF of 12 and 30
	b	the LCM of 3 and 4.
<hr/>		
a	<p>Factors of 12 = 1, 2, 3, 4, 6, 12</p> <p>Factors of 30 = 1, 2, 3, 5, 6, 10, 15, 30</p> <p>HCF (highest common factor) = 6</p>	
b	<p>Multiples of 3 = 3, 6, 9, 12, 15, 18, 21, 24, ...</p> <p>Multiples of 4 = 4, 8, 12, 16, 20, 24, 28, ...</p> <p>LCM (lowest common multiple) = 12</p>	

6.

	<p>a What is the total volume of Judy's Punch in</p> <p>i litres</p> <p>ii millilitres?</p> <p>b A glass holds 100 ml. How many glasses can Judy fill from her punch bowl?</p>	<p><u>Judy's Punch</u></p> <p>5 litres lemonade</p> <p>1 litre of pineapple juice</p> <p>500 ml of watermelon juice</p>
<p>(a) Ans.</p>	<p>5 litres + 1 litre + 500 ml (0.5 litre)</p> <p>(i) 6.5 litres</p> <p>(ii) $6.5 \times 1000 = 6500$ ml</p>	
<p>(b) Ans.</p>	<p>One glass = 100 ml</p> <p>$6500 \text{ ml} \div 100 \text{ ml} = 65$ glasses</p>	

7.

<p>A shopping bag has a mass of 80 g. The bag contains two 1.5 kg bags of sugar and five 30 g packets of crisps. Find the total mass of the bag and its contents in</p> <p>a grams b kilograms</p>	
<p>a Total mass = $80 \text{ g} + (2 \times 1500 \text{ g}) + (5 \times 30 \text{ g})$</p> <p>$= 80 \text{ g} + 3000 \text{ g} + 150 \text{ g}$</p> <p>$= 3230 \text{ g}$</p>	
<p>b Total mass = $3230 \div 1000$</p> <p>$= 3.23 \text{ kg}$</p>	

8. **a) Write down the first three multiples of 7.**

b) What are the factors of 42 ?

Ans. (a) Multiples of 7 are 1×7 , 2×7 , 3×7 etc.

First three multiples of 7 are 7 , 14 , 21

(b) Factors of 42 = 1, 2, 3, 6, 7, 14, 21, 42

9. If $x = 5$ and $y = 7$, find the value of

a) $2 \times y$

b) $8x - 2y$

c) $3y(11 - x)$

Ans. a) $2 \times y = 2 \times 5 \times 7$
 $= 70$

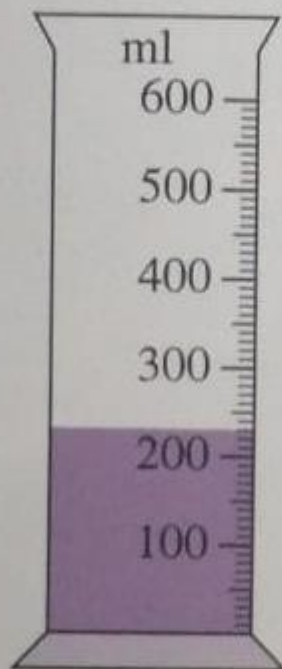
b) $8x - 2y = 8 \times 5 - 2 \times 7$
 $= 40 - 14$
 $= 26$

c) $3y(11 - x) = 3 \times 7 \times (11 - 5)$
 $= 3 \times 7 \times 6$
 $= 126$

10.

I add the water from this measuring cylinder to 4.1 litres of water.

How much water do I now have altogether?



Make the units the same

4.1 litres is 4100 ml

This scale says 230 ml

$$4100 + 230 = 4330 \text{ ml}$$

or 4.33 litres

***** *Best of Luck* *****