

# G5 Revision 3

## (1) Complete the following:

- 1) If  $5 \in \{3, 2, x\}$ , then  $X =$  \_\_\_\_\_
- 2)  $\frac{2}{5}$  is the reciprocal of \_\_\_\_\_
- 3)  $4\frac{1}{3}$  minutes = \_\_\_\_\_ Seconds
- 4)  $7.81 \times 1000 = 78.1 \times$  \_\_\_\_\_
- 5)  $1\frac{1}{2} + 3\frac{2}{3} =$  \_\_\_\_\_
- 6) If  $7 \in \{2, 5, x + 3\}$ , then  $X =$  \_\_\_\_\_
- 7) If  $y \subset X$  then  $y \cap X =$  \_\_\_\_\_
- 8) If  $X \subset Y$  then  $X \cup Y =$  \_\_\_\_\_
- 9)  $3\frac{1}{8} \cong$  \_\_\_\_\_ To the nearest hundredth
- 10)  $42.5 + 6.148 =$  \_\_\_\_\_  $\cong$  \_\_\_\_\_ to the nearest  $\frac{1}{10}$
- 11) 255 hours  $\cong$  \_\_\_\_\_ days
- 12) The diameter length of the circle whose radius 4 cm is \_\_\_\_\_
- 13) The probability of the certain event is \_\_\_\_\_
- 14) The probability of the impossible event is \_\_\_\_\_
- 15) If the probability that a pupil passes an exam is  $\frac{8}{10}$ , then the probability that this pupil fails is \_\_\_\_\_
- 16) If  $X \cup Y = \emptyset$ , then each of  $X$  and  $y$  is \_\_\_\_\_
- 17) If  $X \cup y = y$ , then  $X \cap y =$  \_\_\_\_\_
- 18)  $\frac{3}{5} < \frac{x}{10} < \frac{4}{5}$ , then  $X =$  \_\_\_\_\_
- 19) If  $\{a, 5\} = \{b, 3\}$ , then  $a =$  \_\_\_\_\_,  $b =$  \_\_\_\_\_
- 20)  $\{7, 6\} \cup \{7, 8, 9\} =$  \_\_\_\_\_

**(Q3)**

☞ If  $X = \{3, 4, 5\}$ ,  $Y = \{2, 3, 4\}$ ,

Place the suitable symbol  $\in$  or  $\notin$  or  $\subset$  or  $\not\subset$  in the blanks.

①  $2 \dots X$

②  $\{3, 5\} \dots X \cap Y$

③  $\{3, 2\} \dots X \cup Y$

④  $5 \dots X - Y$

⑤  $\emptyset \dots Y$

⑥  $\{2, 3, 4\} \dots X$

**(Q4)**

- a) The following table lists the number of 120 volunteers in 3 groups to make uniforms for cleaners.

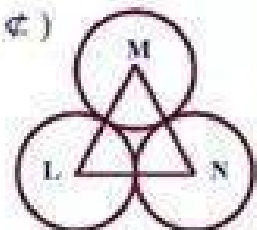
Group	Distribution	Printing	Design
Number of volunteers	60	30	30

A volunteer has been randomly selected. What is the probability to be one of the printing groups?

- b) A truck can hold 125 boxes of oranges at a time. How many times are needed to deliver 4375 boxes by that truck?

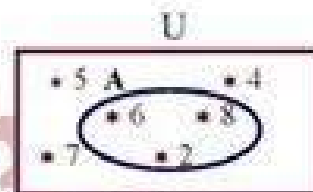
**(Q5) Choose the correct answer from the parentheses:**

- If  $\{2, 5, 7\} = \{5, A, 2\}$  then  $A = \dots$  ( $2, 5, , 0$ )
- If A, B belong to the circle M where  $M \in$  then is called a (chord – diameter – radius) in the circle.
- $78.26 \div 10 \dots 7.826 \times 10$  ( $>$  or  $=$  or  $<$ )
- $\{5\} - \{1, 2, 5\} = \dots$  ( $\{5\}, \{1, 2\}, \emptyset, \{1, 2, 5\}$ )
- If  $a \in X$  then  $a \dots X$  ( $\in, \notin, \subset, \not\subset$ )
- In the opposite figure, If the length of each radius in the three circles is 3 cm, then the perimeter of the triangle LN =  $\dots$  cm ( $6 - 9 - 18$ )



☞ Draw a circle whose center is M and radius 2 cm then draw two radii  $\overline{MX}$ ,  $\overline{MY}$  and the included angle between them measures  $60^\circ$  then draw  $\overline{XY}$  and find the length of  $\overline{XY}$ .

- 21) If  $\{2, 5, 7\} \cap \{3, 7, 1\} =$  \_\_\_\_\_
- 22) The longest chord of the circle is \_\_\_\_\_
- 23) If  $\frac{a}{7} = 1$ , then  $a =$  \_\_\_\_\_
- 24)  $4.5 \div$  \_\_\_\_\_  $= 18$
- 25) \_\_\_\_\_  $\div 1000 = 8.31$
- 26) If  $\{2, 3\} - \{3, x\} = \emptyset$ , then  $X =$  \_\_\_\_\_
- 27) If  $5 \notin \{1, x, 4\}$ , then  $Xx =$  \_\_\_\_\_
- 28) If  $8 \in \{3, 2x, 5\}$ , then  $X =$  \_\_\_\_\_
- 29) 1.9, 2.8, 3.7, \_\_\_\_\_, \_\_\_\_\_
- 30) In the opposite Venn diagram :  $A \setminus =$  \_\_\_\_\_



**(2) Choose the correct answer:**

- 1)  $23.4359 \cong$  \_\_\_\_\_ to the nearest thousandth. (23.44, 23.436, 23.4, 23.43)
- 2) Number of altitudes of an obtuse angled triangle is \_\_\_\_\_ (0, 1, 2, 3)
- 3)  $345.6 \text{ cm} \cong$  \_\_\_\_\_ meter. (3, 4, 3.4, 5)
- 4)  $X \cap X' =$  \_\_\_\_\_ ( $X$ ,  $X'$ ,  $U$ ,  $\emptyset$ )
- 5)  $172 \times 0.003$  \_\_\_\_\_  $0.172 \times 0.3$  ( $<$ ,  $>$ ,  $=$ )
- 6) If  $\frac{x}{8} = \frac{15}{24}$ , then  $x =$  \_\_\_\_\_ (3, 5, 4, 12)
- 7)  $3\frac{1}{8} \cong$  \_\_\_\_\_ To the nearest hundredth. (3.15, 3.13, 3, 3.1)
- 8) If  $M = \{5, 2, 3\} \cap \{1, 5\}$ , then  $M$  \_\_\_\_\_ {2} ( $\in$ ,  $\notin$ ,  $\subset$ ,  $\not\subset$ )
- 9)  $\{2, 11\}$  \_\_\_\_\_ {set of odd numbers} ( $\in$ ,  $\notin$ ,  $\subset$ ,  $\not\subset$ )
- 10) 4 \_\_\_\_\_ {set of factors of 12} ( $\in$ ,  $\notin$ ,  $\subset$ ,  $\not\subset$ )
- 11)  $\emptyset$  \_\_\_\_\_ {0}. ( $\in$ ,  $\notin$ ,  $\subset$ ,  $\not\subset$ )
- 12) The decimal which is included between 0.6 and 0.7 is \_\_\_\_\_ (0.71, 0.59, 0.61, 0.72)
- 13)  $19.45 \times 100 =$  \_\_\_\_\_ (0.1945, 1945, 1.945, 194.5)
- 14) If  $X \subset Y$  and  $Y \subset X$ , then \_\_\_\_\_ ( $X = Y$ ,  $X \subset Y$ ,  $X - Y = X$ )
- 15) 3 \_\_\_\_\_  $\{2, 3\} \cap \{2, 4\}$  ( $\in$ ,  $\notin$ ,  $\subset$ ,  $\not\subset$ )

# G5 Revision 1

## (Q1) Answer the following:

- 1)  $65.3814 + 63.4027 = \dots \approx \dots$  (to the nearest  $\frac{1}{1000}$ )
- 2)  $53.27 - 2.1 = \dots \approx \dots$  (to the nearest tenth)
- 3)  $(3.425 + 1.07) \div 2.8 = \dots \approx \dots$  (to the nearest hundredth)
- 4)  $9.568 \div 9 = \dots \approx \dots$  (to the nearest whole number)
- 5)  $\dots \div 9 = 4.5$
- 6) The chord of a circle is a line segment that connects  $\dots$
- 7) 2.9 ton =  $\dots$  kg
- 8) A box contain 24 lamps, 3 lamps are defective. A lamp has been randomly selected, the probability of getting a functional lamp =  $\dots$
- 9) If  $X = \{2, 3\}$ ,  $Y = \{3, 5\}$ , then  $X \cap Y = \dots$
- 10) 254 hours  $\approx \dots$  days

## (Q2)

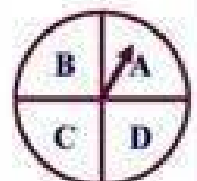
- a) The area of a rectangle is  $9.43 \text{ cm}^2$  and its width is 2.45 cm. find its length and approximate it to the nearest hundredth of centimeter.

### b) Compare:

- |                   |                      |                  |                      |                      |                             |
|-------------------|----------------------|------------------|----------------------|----------------------|-----------------------------|
| ① $0.46 \div 4.6$ | <input type="text"/> | 0.01             | ② $17.17 \times 1.7$ | <input type="text"/> | 39                          |
| ③ $53.7 \div 3.5$ | <input type="text"/> | $5.37 \div 0.35$ | ④ $845 \div 4.9$     | <input type="text"/> | $(84.5 \div 49) \times 0.1$ |

- c) A spinner is divided into 4 equal sections.

- ① What is the probability of spinning the letter B?
- ② Spin the spinner 400 times. What is the predicted number of getting letter A?





### Answer the questions:

- 1) Rania made some juice. She gave  $\frac{1}{4}$  of it to her neighbor and poured the rest equally into 9 bottles. What fraction of the juice did each bottle contain?
- 2) A teacher bought a piece of cloth 10.5 meters long to be distributed equally among excellent girls. She gave each girl a piece of 1.5 m . How many excellent girls are there?
- 3) If water is poured in a box at a rate of 1.45 liters each hour, calculate the amount of water poured in 4.8 hours?
- 4) Marwa had L.E. 60 she spent  $\frac{1}{3}$  of her money on meat and  $\frac{1}{4}$  of the money on vegetables. How much did she spend altogether?
- 5) In a school  $\frac{2}{5}$  of the pupils are girls and 900 are boys. What is the total number of pupils in this school?
- 6) Find the area of the square whose side length is 4.06 m. to the nearest hundredth.
- 7) Hany has 30 pounds. He bought 12 cans, each for 1.85 pounds. What is the remainder with him?
- 8) A card is drawn at random from 10 cards numbers from 1 to 10 find the probability that the drawn card carries:
  - Ⓐ A prime number.
  - Ⓑ An even number greater than 6
  - Ⓒ A box contains cards numbered from 1 to 20 .if a card is drawn randomly , the probability that the card number is divisible by 6 ?
- 9) Draw the triangle ABC where  $AB = 7.5$  cm. ,  $BC = 10$  cm. and  $CA = 8$  cm. , draw the altitude from A to  $\overline{BC}$  and measure its length.
- 10) Draw the triangle ABC in which:  $AB = 6$  cm. ,  $BC = 3$  cm. and  $m(\angle B) = 60^\circ$   
Measure the lengths of the altitudes of the triangle ABC
- 11) Draw a circle M of radius 3 cm. Draw the diameter  $\overline{AB}$  and the chord  $\overline{AC}$  of length 4 cm.  
Draw  $\overline{BC}$  and find it's length

**(Q3)**

- a) Draw a circle whose centre is **M** and radius is 2.5 cm. then draw its diameter  $\overline{AB}$  and draw its chord  $\overline{AC}$  of length 3 cm. Draw  $\overline{BC}$  then find its length.
- b) If  $U = \{1, 2, 3, 4, 5, 6\}$ ,  $X = \{2, 3, 5\}$  and  $Y = \{3, 4, 5\}$  Represent the sets by Venn diagram. Then write each of the following by listing method:
- $X \cup Y$
  - $X \cap Y$
  - $X - Y$
  - $X^c$
- c) Find the product of  $58.62 \times 35.2$  and approximate it to the nearest hundredth.

**(Q4) Choose the correct answer:**

- The number of subsets for the set  $\{5\}$  is ..... ( 0 , 1 , 2 , 3 )
- If **M** is a circle whose diameter is 8 cm where  $MA = 7$  cm then the point **A** is located ..... the circle. ( inside , outside , on )
- $654 \div 76 = 6.54 + \dots\dots\dots$  ( 76 , 0.76 , 7.6 )
- If  $X \subset Y$  then  $X \cap Y = \dots\dots\dots$  (  $X, Y, \emptyset, U$  )
- $\emptyset \dots\dots \{0\}$  (  $= - \subset - \varnothing - \in$  )

**(Q5)**

- a) Draw the isosceles triangle **ABC** in which  $BC = 4$  cm, and  $AB = AC = 6$  cm Then, draw perpendicular segments from their vertices to their three sides.
- b) The following table lists the results of a survey applied on 100 spectators of T.V

Program	Football matches	News	Series	Foreign films	Arabic films
Number of spectators	36	10	15	20	19

A spectator has been randomly selected. Find the probability of selecting a spectator prefers:

- ① Football matches                      ② Foreign films                      ③ Series                      ④ News