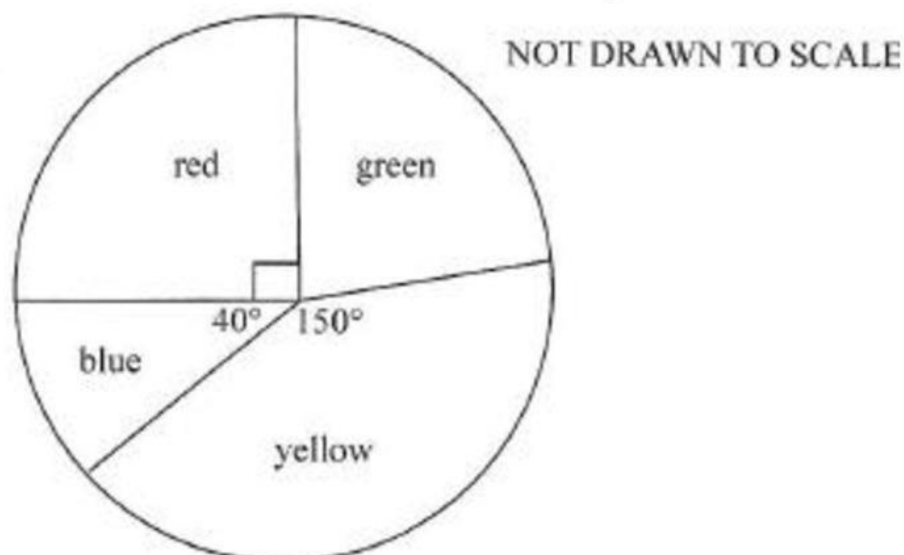


12. There are only red, green, yellow, and blue crayons in a box.  
The pie chart gives information about the numbers of crayons of each colour.



- (a) Calculate the fraction of red crayons in the box.

**Red Crayons Fraction** =  $\frac{\quad}{\quad}$  =  $\frac{\quad}{\quad}$

Answer: \_\_\_\_\_ [1]

Find:

- (b) (i) the angle used for green

Answer: \_\_\_\_\_ [2]

- (ii) the ratio of blue to green in simplest form.

**Initial Ratio** =

**Simplified Ratio** =

Answer: \_\_\_\_\_ [2]

There are 72 crayons in the box.

- (c) Calculate the number of yellow crayons in the box.

**Yellow Crayons Fraction** =  $\frac{\quad}{\quad}$

**Yellow Crayons Computation**

$\frac{\quad}{\quad} \times \frac{\quad}{\quad}$

Answer: \_\_\_\_\_ [2]

12. Margo Forbes earns \$9 per hour when she works a basic week of 40 hours.

(a) Calculate the amount of her basic pay.

Answer: \_\_\_\_\_ [2]

(b) Overtime is paid at time and a half.

How much does she earn for 1 hour of overtime?

Answer: \_\_\_\_\_ [2]

(c) Calculate Margo's total wage for the week if she worked 6 hours of overtime in addition to her basic hours.

**Over Time Pay = \$**

**Total Wages = \$**

Answer: \_\_\_\_\_ [3]

12. (a) Arrange the following in descending order.

$$\frac{4}{8}, \frac{5}{6}, \frac{7}{12}, \frac{2}{3}$$

**Equivalent Fractions with L.C.D.**

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**Fractions in DESCENDING Order**

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Answer: \_\_\_\_\_ [3]

(b) Find the sum  $\frac{3}{4}$  and  $\frac{5}{7}$ . Express your answer as a mixed fraction.

**Fractions Computation with L.C.D.**

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

**Mixed Fraction =**  $\underline{\hspace{2cm}}$

Answer:  $\underline{\hspace{10cm}}$  [3]

12. Sara is paid \$9.00 per hour when she works a 40 hour week.

(a) Calculate her basic weekly pay.

Answer: \$  $\underline{\hspace{10cm}}$  [2]

Overtime is paid at time and a half.

(b) Calculate the amount of money she is paid for 1 hour of overtime.

Answer: \$  $\underline{\hspace{10cm}}$  [2]

(c) Calculate the amount of money she is paid for 3 hours of overtime.

Answer: \$  $\underline{\hspace{10cm}}$  [2]

(d) Calculate her total pay for the week when she worked her basic hours plus 3 hours of overtime.

Answer: \$  $\underline{\hspace{10cm}}$  [2]

12. Mary scored the following results on eight of her mathematics quizzes

56%    58%    79%    56%    91%    83%    88%    81%

(a) Determine her

(i) median score,

Answer:  $\underline{\hspace{10cm}}$  [3]

(ii) modal score.

Answer:  $\underline{\hspace{10cm}}$  [1]

- (b) Calculate her mean (average) score.

**Total Percentage =**

**Average Percentage =**

Answer: \_\_\_\_\_ [3]

12. Mr. Green builds a rectangular patio that measures 14 feet by 18 feet.

- (a) Calculate the area of the patio.

Answer: \_\_\_\_\_ ft.<sup>2</sup> [2]

The patio is to be painted. A can of paint covers 12 square feet.

- (b) Calculate the number of cans of paint needed.

Answer: \_\_\_\_\_ [2]

Each can of paint cost \$13.50.

- (c) Calculate the total cost of the paint.

Answer: \$ \_\_\_\_\_ [2]

12.  $\epsilon = \{1, 2, 3, 4, 5, 6, 7, 8\}$

$$A = \{2, 4, 6, 8\}$$

$$B = \{\text{factors of } 8\}$$

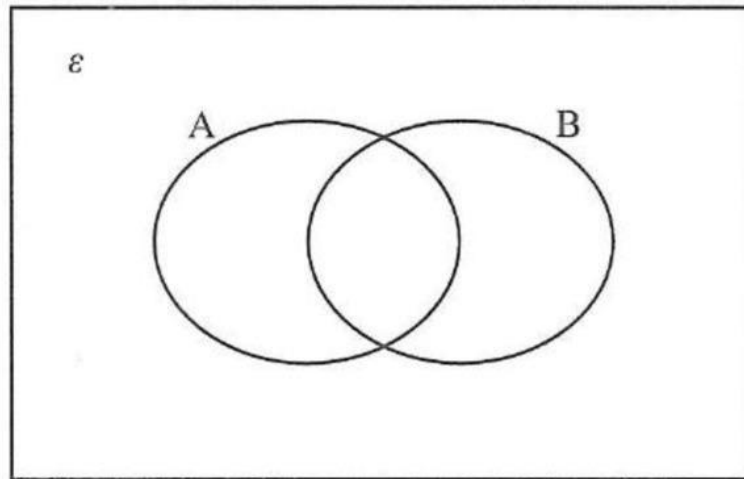
- (a) Describe set A.

Answer: \_\_\_\_\_ [2]

- (b) List the members of B.

Answer: { \_\_\_\_\_ } [1]

- (c) Use the information to complete the Venn diagram below. [4]



- (d) State the member(s):

(i)  $A \cup B$  Answer: {\_\_\_\_\_} [1]

(ii)  $A \cap B$  Answer: {\_\_\_\_\_} [1]

(iii)  $B'$  Answer: {\_\_\_\_\_} [1]