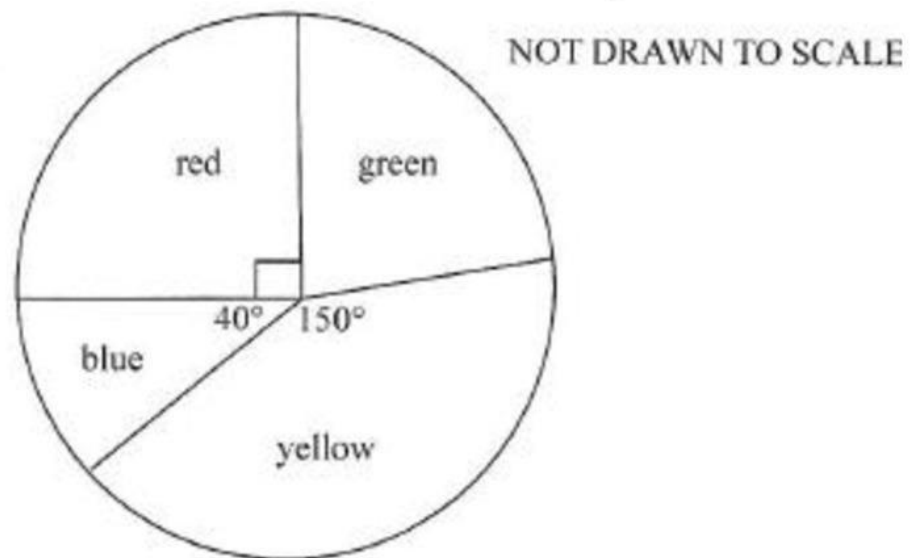


12. There are only red, green, yellow, and blue crayons in a box.
The pie chart gives information about the numbers of crayons of each colour.



- (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

_____ $\times$ _____

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: $\underline{\hspace{4cm}}$ [3]

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

(a) Calculate her basic weekly pay.

Answer: \$ $\underline{\hspace{4cm}}$ [2]

Overtime is paid at time and a half.

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

Answer: \$ $\underline{\hspace{4cm}}$ [2]

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

Answer: \$ $\underline{\hspace{4cm}}$ [2]

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

Answer: \$ $\underline{\hspace{4cm}}$ [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: $\underline{\hspace{4cm}}$ [3]

(ii) modal score.

Answer: $\underline{\hspace{4cm}}$ [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.² [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. $\varepsilon = \{1, 2, 3, 4, 5, 6, 7, 8\}$

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

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

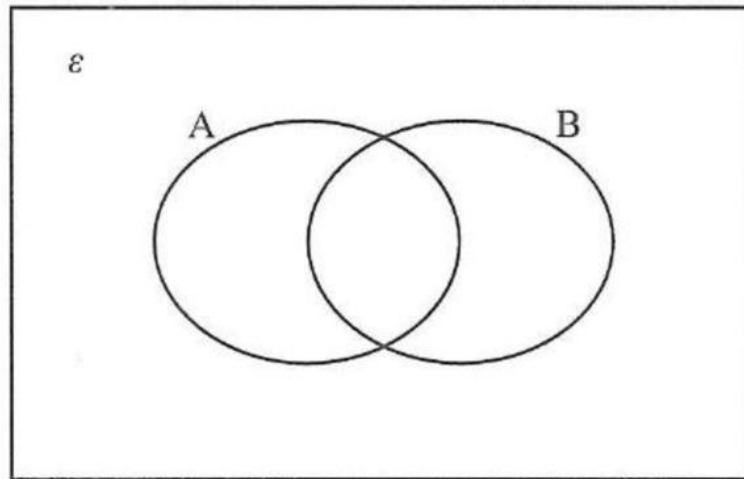
- (a) Describe set A.

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]