

FORM 1

CHAPTER 4

Summative Practice

Section A

- 1 Ratio of shaded region to unshaded region

$$= 5 : 10$$

$$= 1 : 2$$

Answer: **B**

- 2 $4 : 6 = 2 : 3$

$$A \rightarrow 7 : 21 = 1 : 3$$

$$B \rightarrow 22 : 33 = 22 \div 11 : 33 \div 11 = 2 : 3$$

$$C \rightarrow 3 : \frac{9}{2} = 3 \times \frac{2}{3} : \frac{9}{2} \times \frac{2}{3} = 2 : 3$$

$$D \rightarrow 0.26 : 0.39 = 0.26 \div 0.13 : 0.39 \div 0.13 = 2 : 3$$

Answer: **A**

- 3 Number of days \rightarrow June : December : August

$$= 30 : 31 : 31$$

Answer: **D**

- 4 Apples : Oranges = $2 : 3$

$$\frac{2}{3} = \frac{28}{x}$$

$$x = 28 \times \frac{3}{2} = 42$$

Answer: **B**

- 5 $AB = \frac{1}{3} \times 45 = 15$ cm, $BC = 45$ cm,

$$CD = 200 - 15 - 45 = 140$$
 cm

$$\text{Ratio of } AB : BC : CD = 15 : 45 : 140 = 3 : 9 : 28$$

Answer: **C**

- 6 Novel : Magazine = $7 \times 2 : 3 \times 2 = 14 : 6$

$$\text{Fiction : Novel} = 5 \times 7 : 2 \times 7 = 35 : 14$$

$$\text{Fiction : Novel : Magazine} = 35 : 14 : 6$$

Answer: **D**

- 7 Athen : Mary : Sarah = $4 : 5 : 2$

$$\text{Ratio value of Mary} = 5,$$

$$\text{Difference in ratio value between Athen and Sarah}$$

$$= 4 - 2 = 2$$

$$\text{Mary's scores} = 75$$

$$x = \text{Difference in Athen's and Sarah's scores}$$

$$\frac{5}{2} = \frac{75}{x}$$

$$x = 75 \times \frac{2}{5} = 30$$

Answer: **B**

- 8 L = Width of rectangle N

$$\text{Rectangle } M \rightarrow \text{Length : Width}$$

$$= 8 : 24$$

$$= 1 : 3$$

$$\text{Rectangle } N \rightarrow \text{Length : Width}$$

$$= 7 : L$$

$$= 1 : 3$$

$$\frac{7}{L} = \frac{1}{3}$$

$$L = 7(3) = 21$$
 cm

$$\text{Perimeter of rectangle } N$$

$$= 2(21) + 2(7)$$

$$= 56$$
 cm

Answer: **D**

- 9 T = Monthly allowance

$$\frac{30}{100} \times T = 54$$

$$T = 54 \times \frac{100}{30}$$

$$= \text{RM}180$$

Answer: **B**

- 10 Number of blue pens : price = $10 : 8$

$$\text{Number of pencil cases : price} = 2 : 5$$

$$x = \text{price of 15 blue pens}$$

$$\frac{10}{15} = \frac{8}{x}$$

$$x = 8 \times \frac{15}{10}$$

$$= \text{RM}12$$

$$y = \text{price of 5 pencil cases}$$

$$\frac{2}{5} = \frac{5}{y}$$

$$y = 5 \times \frac{5}{2}$$

$$= \text{RM}12.50$$

$$\text{Total price} = 12 + 12.50 = \text{RM}24.50$$

Answer: **C**

Section B

1	Ratio	True or False
(a)	5 : 14 : 18	False
(b)	10 : 14 : 8	True
(c)	5 : 4 : 7	False
(d)	5 : 7 : 4	True

- 2 (a) Lemon : Grapes = $5 : 8$

$$\text{Grapes : Total} = 8 : 5 + 8$$

$$= 8 : 13$$

(i)

Lemons to Grapes

$$5 : 13$$

$$8 : 5$$

(ii)

Grapes to total fruits in basket

$$8 : 13$$

$$5 : 8$$

- (b) $250 \div 2 : 4 \div 2 = 125 : 2$

$$500 \div 4 : 8 \div 4 = 125 : 2$$

Therefore, both are equivalent ratios.

$$50 \div 5 : 75 \div 5 = 10 : 15$$

$$10 \div 1 : 15 \div 1 = 10 : 15$$

Therefore, both are equivalent ratios.

Ratio of 250 km to 4 hours and ratio of 500 km to 8 hours.



Ratio of 50 kg to 75°C and ratio of 10 kg to 15°C .



Section C

- 1 (a) Number of : Price = $2 : 3$

$$x = \text{price of 6 ketupat}$$

$$\frac{2}{3} = \frac{6}{x}$$

$$x = \frac{6}{2}(3)$$

$$= \text{RM}9$$

y = price of 8 *ketupat*

$$\frac{2}{3} = \frac{8}{y}$$

$$y = \frac{8}{2}(3)$$

$$= \text{RM}12$$

$$\therefore x = 9, y = 12$$

- (b) Workshop A \rightarrow Total payment for
4 tyres = 220(3)
= RM660

Workshop B \rightarrow Total payment for
4 tyres = 165(4)
= RM660

Workshop C \rightarrow Total payment for 4 tyres

$$= 200(4) \times \frac{80}{100}$$

$$= \text{RM}640$$

Mr Adam will choose workshop C.

- (c) Total shirts = 20

$$\text{Red} = \frac{30}{100}(20) = 6, \text{Blue} = 2(6) = 12$$

- (i) Number of white shirts
= 20 - 6 - 12
= 2

- (ii) Percentage ratio
= red : blue : white
= 30% : $\frac{12}{20} \times 100$: $\frac{2}{20} \times 100$
= 30 : 60 : 10
= 3 : 6 : 1