

**FORM 1**  
**CHAPTER 10**

**Summative Practice**

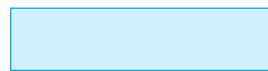
**Section A**

- $5 \text{ cm} \times 12 = 60 \text{ cm}$   
Answer: **A**
- $5 \text{ cm} \times 5 = 25 \text{ cm}$   
Answer: **C**
- Area of  $STUW = 24 \text{ cm} \times 15 \text{ cm} = 360 \text{ cm}^2$   
Area of  $UVXY = 9 \text{ cm} \times 15 \text{ cm} = 135 \text{ cm}^2$   
Area of shaded region  
 $= 360 \text{ cm}^2 - 135 \text{ cm}^2 = 225 \text{ cm}^2$   
Answer: **B**
- Area of  $ABH = \frac{1}{2} \times 12 \text{ cm} \times 12 \text{ cm} = 72 \text{ cm}^2$   
Area of  $CDGH = 30 \text{ cm} \times 10 \text{ cm} = 300 \text{ cm}^2$   
Area of  $DEF = \frac{1}{2} \times 12 \text{ cm} \times 15 \text{ cm} = 90 \text{ cm}^2$   
Area of the whole diagram  $= 72 \text{ cm}^2 + 300 \text{ cm}^2 + 90 \text{ cm}^2 = 462 \text{ cm}^2$   
Answer: **B**
- Area of floor  $= 8 \text{ m} \times 10 \text{ m} = 800 \text{ cm} \times 1\,000 \text{ cm} = 800\,000 \text{ cm}^2$   
Area of a tile  $= 20 \text{ cm} \times 20 \text{ cm} = 400 \text{ cm}^2$   
Number of tiles  $= 800\,000 \text{ cm}^2 \div 400 \text{ cm}^2 = 2\,000$  pieces  
Answer: **D**
- Perimeter of  $BCDE = BC + CD + DE + BE$   
 $28 \text{ cm} = BC + 5 \text{ cm} + DE + 5 \text{ cm}$   
 $28 \text{ cm} = BC + 10 \text{ cm} + DE$   
 $18 \text{ cm} = 2BC$   
 $BC = 9 \text{ cm}$   
 $AC = 2BC = 2 \times 9 \text{ cm} = 18 \text{ cm}$   
 $CG = 2CD = 2 \times 5 \text{ cm} = 10 \text{ cm}$   
Area of  $ACGH = 18 \text{ cm} \times 10 \text{ cm} = 180 \text{ cm}^2$   
Area of  $BCDE = 5 \text{ cm} \times 9 \text{ cm} = 45 \text{ cm}^2$   
Area of shaded region  
 $= \text{Area of } ACGH - \text{Area of } BCDE = 180 \text{ cm}^2 - 45 \text{ cm}^2 = 135 \text{ cm}^2$   
Answer: **A**

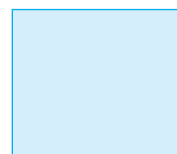
**Section B**

- (a) For rectangles with the same area, but with different perimeters, the larger the difference between the length and width of the rectangle, the larger is its perimeter.

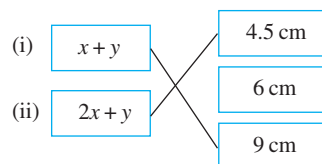
The first diagram has the largest perimeter.



- (b) For rectangles with the same perimeter but different areas, the area will be the largest when the rectangle becomes a square. The fourth diagram has the largest area.



- (c)  $10 \text{ cm} + x + 5 \text{ cm} + 7 \text{ cm} + 6 \text{ cm} + 5 \text{ cm} + y = 42 \text{ cm}$   
 $x + y + 33 \text{ cm} = 42 \text{ cm}$   
 $x + y = 9 \text{ cm}$   
 $x = 4.5 \text{ cm}; y = 4.5 \text{ cm}$   
 $2x - y = 2(4.5) - 4.5 = 4.5 \text{ cm}$



**Section C**

- (a) (i) Length of side  $= 2 \text{ cm}$   
Perimeter of shaded region  $= 2 \text{ cm} \times 16 = 32 \text{ cm}$   
(ii) Area of a square  $= 2 \text{ cm} \times 2 \text{ cm} = 4 \text{ cm}^2$   
Area of shaded region  $= 4 \text{ cm}^2 \times 8 = 32 \text{ cm}^2$
- (b) (i)  $AB = EF = 20 \text{ m} - 3 \text{ m} = 17 \text{ m}$   
 $DE = AH = 15 \text{ m} - 4 \text{ m} = 11 \text{ m}$   
 $BD = FH = 5 \text{ m}$   
Perimeter of shaded region  $= 17 \text{ m} + 5 \text{ m} + 11 \text{ m} + 17 \text{ m} + 5 \text{ m} + 11 \text{ m} = 66 \text{ m}$   
(ii)  $\Delta FGH = \Delta BCD$   
 $= \frac{1}{2} \times 4 \text{ m} \times 3 \text{ m} = 6 \text{ m}^2$   
Area of  $ACEG = 20 \text{ m} \times 15 \text{ m} = 300 \text{ m}^2$   
Area of shaded region  $= 300 \text{ m}^2 - 6 \text{ m}^2 - 6 \text{ m}^2 = 288 \text{ m}^2$   
(iii) Cost  $= 20 \times 288 = \text{RM}5\,760$