BAB 13

Praktis Sumatif

Bahagian A

1 $60^2 + 25^2 = 3\,600 + 625$
$\qquad\qquad = 4\,225$
$\qquad\qquad = 65^2$
Jawapan: **C**

2 $y^2 = x^2 + z^2$
$z^2 = y^2 - x^2$
$x^2 = y^2 - z^2$
Jawapan: **B**

3 $(x+40)^2 = 48^2 + 14^2$
$(x+40)^2 = 2\,304 + 196$
$\qquad\quad = 2\,500$
$(x+40)^2 = 50^2$
$\quad x + 40 = 50$
$\qquad\quad x = 10$
Jawapan: **A**

4 $AB = 18 - 13$
$\qquad = 5$
$BE^2 = 12^2 + 5^2$
$\qquad = 144 + 25$
$\qquad = 169$
$BE^2 = 13^2$
$BE = 13$
Jawapan: **D**

5 $OR^2 = 20^2 - 16^2$
$\qquad = 400 - 256$
$\qquad = 144$
$OR = 12$
$PO = 2OR$
$\qquad = 2 \times 12$
$\qquad = 24$
$PQ^2 = 24^2 + 7^2$
$\qquad = 576 + 49$
$\qquad = 625$
$PQ = 25$
Jawapan: **C**

6 $DG^2 = AG^2 - AD^2$
$\qquad = 5^2 - 3^2$
$\qquad = 16$
$DG = 4$
Luas segi empat $ABCD = 3 \times 3$
$\qquad\qquad\qquad\qquad = 9 \text{ cm}^2$
Luas segi empat $DEFG = 4 \times 4$
$\qquad\qquad\qquad\qquad = 16 \text{ cm}^2$
Luas segi empat $AGHI = 5 \times 5$
$\qquad\qquad\qquad\qquad = 25 \text{ cm}^2$
Luas segi tiga $ADG = \dfrac{1}{2} \times 3 \times 4$
$\qquad\qquad\qquad\quad = 6 \text{ cm}^2$
Luas seluruh rajah
$= 9 \text{ cm}^2 + 16 \text{ cm}^2 + 25 \text{ cm}^2 + 6 \text{ cm}^2$
$= 56 \text{ cm}^2$
Jawapan: **B**

Bahagian B

1 (a)
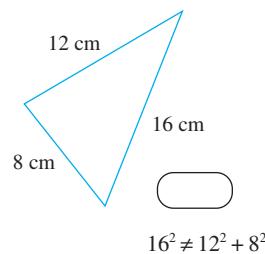
$16^2 \neq 12^2 + 8^2$
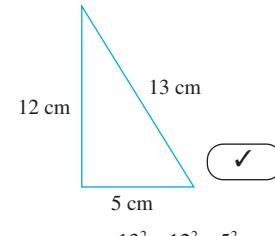
$13^2 = 12^2 + 5^2$
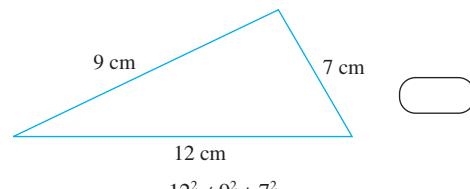
$12^2 \neq 9^2 + 7^2$
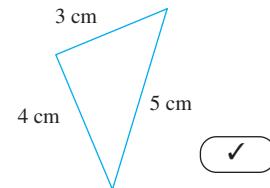
$5^2 = 3^2 + 4^2$

(b) (i) $x^2 = 7.5^2 - 4.5^2$
$\qquad = 56.25 - 20.25$
$\qquad = 36$
$\quad x = 6 \text{ cm}$

(ii) $x^2 = 12.5^2 + 30^2$
$\qquad = 156.25 + 900$
$\qquad = 1\,056.25$
$\quad x = 32.5 \text{ cm}$

Bahagian C

1 (a) (i) $BC^2 = AC^2 - AB^2$
$\qquad\quad BC^2 = 50^2 - 40^2$
$\qquad\qquad\quad = 2\,500 - 1\,600$
$\qquad\qquad\quad = 900$
$\qquad\quad BC = \sqrt{900}$
$\qquad\qquad\quad = 30 \text{ cm}$

(ii) Perimeter $ABC = 50 + 40 + 30$
$\qquad\qquad\qquad\quad = 120 \text{ cm}$

(b) (i) $JM^2 = 10^2 - 6^2$
$\qquad\qquad = 100 - 36$
$\qquad\qquad = 64$
$\quad JM = 8$

Perimeter $JKLM = 8 + x + 10$
$\qquad\qquad\qquad\quad + (x + 6)$
$\qquad\quad 40 = 2x + 24$
$\qquad\quad 2x = 16$
$\qquad\quad\; x = 8$

(ii) Luas trapezium $JKLM$

$= \dfrac{1}{2} \times 8 \times (8 + 8 + 6)$

$= \dfrac{1}{2} \times 8 \times (22)$

$= 88 \text{ cm}^2$

(c)
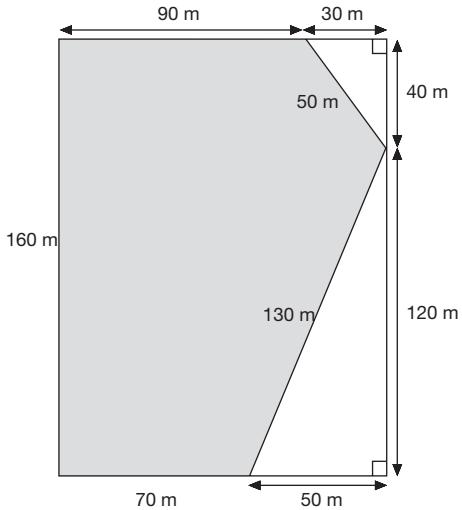
$40^2 + 30^2 = 2\,500$

$\sqrt{2\,500} = 50$

$120^2 + 50^2 = 16\,900$

$\sqrt{16\,900} = 130$

Perimeter $= 90 + 50 + 130 + 70 + 160$

$\qquad\qquad = 500 \text{ m}$

Jumlah kos $= \text{RM}12 \times 500$

$\qquad\qquad = \text{RM}6\,000$