FORM 2
CHAPTER 4

Summative Practice

Section A

1 Answer: **C**

2 Number of axes of symmetry of a regular polygon = Number of sides of the regular polygon.
Answer: **D**

3 $x = \frac{360°}{6} = 60°$

Answer: **B**

4 Interior angle of a regular octagon

$p = \frac{360°}{8} = 45°$

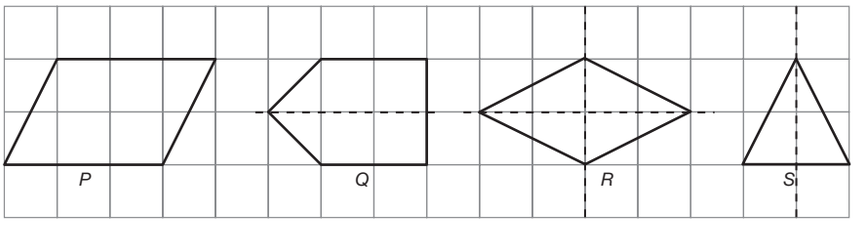
Answer: **A**

5 Total sum of interior angles of a pentagon
$= (5 - 2) \times 180°$
$= 540°$
$k + 98° + 100° + 66° + 118° = 540°$
$k = 540° - 382°$
$= 158°$
Answer: **D**

6 Total sum of exterior angles of a polygon = 360°
$m + 115° + 90° + 90° = 360°$
$m = 360° - 295°$
$= 65°$
Answer: **B**

7 Total sum of interior angles of a hexagon
$= (6 - 2) \times 180°$
$= 720°$
$p + k + l + m + n + 135° = 720°$
$p + k + l + m + n = 720° - 135°$
$= 585°$
Answer: **B**

8



Answer: **C**

9 x = interior angle of a regular pentagon

$= \frac{(5 - 2) \times 180°}{5} = 108°$

y = exterior angle of a regular pentagon

$= \frac{360°}{5} = 72°$

$\therefore x + y = 108° + 72°$
$= 180°$
Answer: **D**

10 Exterior angle $= 220° - 180°$
$= 40°$
Number of sides of regular polygon

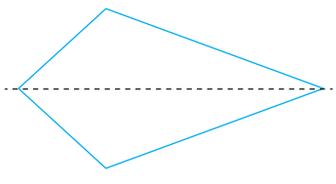
$= \frac{360°}{\text{exterior angle}}$

$= \frac{360°}{40°}$

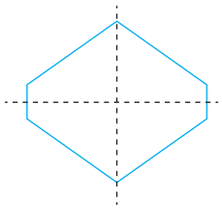
$= 9$
Answer: **B**

Section B

1 (a) (i) Regular polygon
(ii) Irregular polygon
(b) (i) 1



(ii) 2



2 (a) Interior angles = q, r
(b) Exterior angles = p, s

3 (a) ✗
Rhombus is not a regular polygon.
(b) ✓
Number of axes of symmetry of a regular polygon is equal to the number of sides of the regular polygon.
(c) ✓
$(5 - 2) \times 180° = 540°$
The total sum of interior angles of a pentagon is 540°.
(d) ✓
The total sum of exterior angles of a polygon is 360°

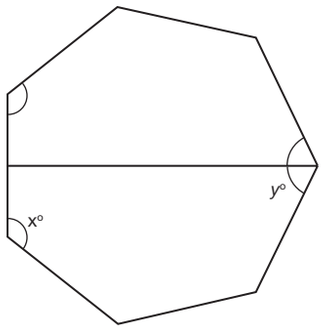
Section C

1 (a) (i) Perimeter $= 15 \times 6$ cm
$= 90$ cm
(ii) Interior angle of a regular hexagon
$= 180° - \frac{360°}{6} = 120°$
Interior angle of a regular pentagon
$= 180° - \frac{360°}{5}$
$= 108°$

$k = 360° - 120° - 108°$

$= 132°$

(b) (i) Heptagon



(ii) $x =$ interior angle of a regular heptagon

$= 180° - \frac{360°}{7}$

$= 128\frac{4}{7}°$

$y = \frac{1}{2}x$

$= 64\frac{2}{7}°$