

Past-paper walk-through

Angles ■ E4.6

eXercise

Questions in this set

- 0580/22 N25 Q6 ■ 7 marks
- 0580/22 N25 Q16 ■ 2 marks
- 0580/43 N25 Q5 ■ 4 marks
- 0580/22 J25 Q3 ■ 1 mark

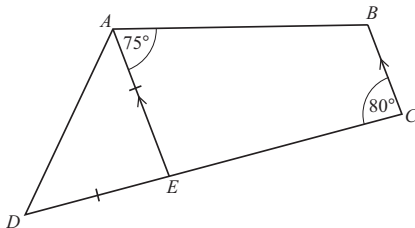
Reading the mark scheme

- **B1** a mark that stands on its own – the point is either made or not.
- **M1** a *method* mark: the right approach, even if the number is wrong.
- **A1** an *answer* mark, and it usually needs its M mark first.
- **C1** a working mark on the way to the answer.
- **//** separates answers the examiner accepts equally.
- **ecf** = error carried forward: a later part is marked on your own earlier answer.
- **owtte** = “or words to that effect” – the wording need not match.

Question 6

0580/22 N25 ■ Q6 ■ 7 marks

6

NOT TO
SCALE

$ABCD$ is a quadrilateral.
 E lies on CD and AE is parallel to BC .
 $EA = ED$.

Find

Question 6

.....

(a) angle ABC

Question 6

(b) angle AED

Question 6

(c) angle DAB .

Solution 6

(a)

Mark scheme

■ 105

Solution 6

(b)

Mark scheme

- 80
- 1

Solution 6

(c)

Mark scheme

- 125
- 2 FT $(180 - \text{their (b)}) \div 2 + 75$ **B1**
- for EAD or EDA = 50
- or B1FT for
- EAD or EDA = 180

Question 16

0580/22 N25 ■ Q16 ■ 2 marks

16 NOT TO SCALE D C B A 14°

AB and BD are two sides of a regular 15-sided polygon.

AB and BC are two sides of a regular n -sided polygon.

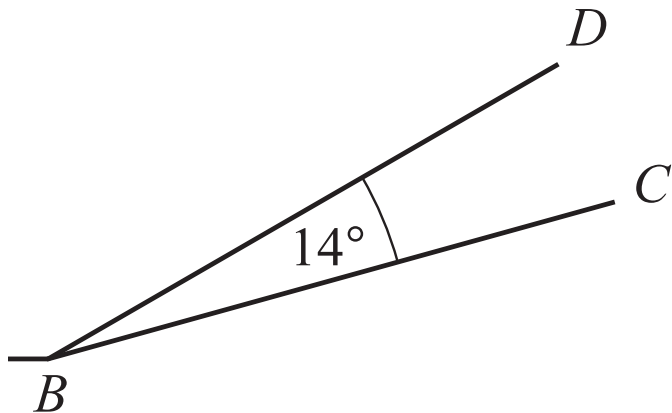
Angle $DBC = 14^\circ$.

Work out the value of n .

$n = [4]$

[2]

Question 16



NOT TO
SCALE

Solution 16

- 36
- 4 M3 for
- 360
- 360
- 1 4
- 15
- (
-)

Solution 16

- $\div$

- —

- (

-)

- (

-)

- oe

- or B2 for 24 or 156

- or M1 for $360 \div 15$ or (

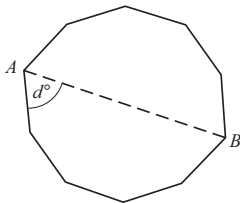
Solution 16

-)
- 15 2 1 80
- 15
- —
- ×
- oe

Question 5

0580/43 N25 ■ Q5 ■ 4 marks

- 5 (a) The diagram shows a regular decagon.
 AB is a line of symmetry of the decagon.

NOT TO
SCALEWork out the value of d .

Question 5

Question 5

- (b) The exterior angle of a regular polygon with n sides is 45° .

Work out the value of n .

Solution 5

(a) Mark scheme

- 72
- 3 M2
- for
- (
-)
- 180 10
- 2

Solution 5

(b)

Mark scheme

■ 8

Question 3

0580/22 J25 ■ Q3 ■ 1 mark

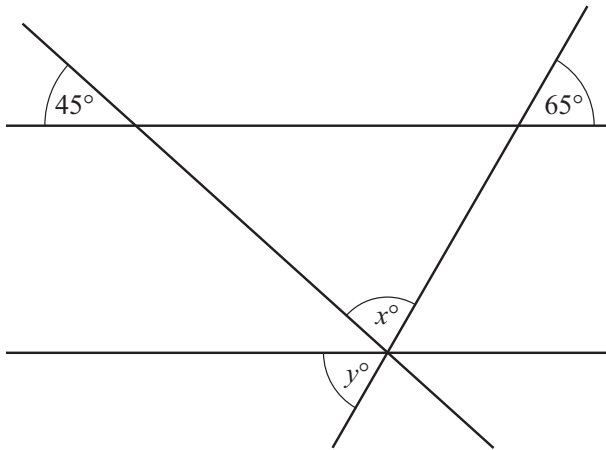
3 NOT TO SCALE 45° 65° y° x°

The diagram shows two straight lines intersecting two parallel lines.
Find the value of x and the value of y .

$x = y = [3]$, ,

[1]

Question 3



Solution 3

$$x = 70$$

- and

$$y = 65$$

- 3 B2 for either correct
- or B1 for 45 and 65 correctly placed on
- diagram
- or M1 for $180 - 45 - 65$ oe