

Past-paper walk-through

Standard form ■ E1.8

eXercise

Questions in this set

- 0580/21 N25 Q15 ■ 3 marks
- 0580/43 N25 Q11 ■ 2 marks
- 0580/22 J25 Q11 ■ 3 marks

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.

Solution 15

(a)

Mark scheme

- 6.6×10^4
- 1

Solution 15

(b) Mark scheme

- 4.07×108
- 2 M1 for figs 407 or for 0.37×108 or
- 37×107 or $107(3.7 \times 10 + 3.7)$ or
- $108(3.7 + 3.7 \div 10)$ oe
- 16
- $x = 2.5$
- $y > 3$
- $y = 4$

Solution 15

- $y = 2x$
- 4 B3 for answer
- $x < 2.5$ $y = 3$ $y < 4$ $y < 2x$
- OR B1
- for each
- If 0 or 1 scored, instead award SC2 for
- recognition of $x = 2.5$, $y = 3$, $y = 4$,
- $y = 2x$
- If 0 scored, SC1 for recognition of $y = 2x$

Question 11

0580/43 N25 ■ Q11 ■ 2 marks

11 .2 89 10 1

■

. 10 1 3 12

. 10 8 3 1

10 9 1 1

.2 10 03 5

■

.3 10 0 2

■

Question 11

Use a number from the box to complete each statement.

The number that is not written in standard form is The largest number is The smallest number is [2] 12 A vase contains flowers that are red or pink or white.

Ruth picks a flower at random from the vase.

The probability that the flower is not red is 0.9 .

The probability that the flower is not pink is 0.65 .

, where c is a whole number.

Find the y-coordinate of the point on the curve with x-coordinate -2 [3] , ,

[2]

Solution 11

Mark scheme

- 0.3×10^{-2}
- 1.3×10^{12}
- 2.03×10^{-5}
- 2 B1 for two correct

Solution 11

(a)

Mark scheme

- $7.08 \times 10^{-3} \text{ cao}$
- 1

Solution 11

(b)

Mark scheme

- 4.18×10^{23} cao
- 2 B1 for figs 418
- or M1 for 0.38×10^{23} or 38×10^{22}
- or $10^{22}(3.8 + 3.8 \times 10)$
- or $10^{23}(3.8 \div 10 + 3.8)$ oe