How to use this mark scheme

Once you have completed the GCSE Maths Diagnostic assessment, use the mark scheme to check your answers. The mark scheme shows the answers and number of marks for each part of the answer. Sometimes you can get a mark for part of the working out, even if the final answer wasn't correct. Sometimes a range of answers is acceptable. These cases are noted in the mark scheme.

Deciding on the right path towards a Mathematics qualification

The purpose of this diagnostic assessment is to help you work out the most suitable path for your learning.

Below 45	**45 and above**
If your mark is below 45, we recommend beginning the *Raising Skills: Maths* course. This self-study programme helps develop your mathematics skills for progression onto a GCSE or other mathematics course.	If your mark is 45 or more, you are ready to work towards a GCSE grade 4 or 5 pass. The *Pearson Edexcel GCSE Maths Online Study Course* would be the best route for you. This 14 week course gives you the opportunity to sit the GCSE Mathematics exam.

You should also take a look at the full GCSE Maths papers, consider how much time you have to commit to studying and how quickly you need to achieve a GCSE qualification. This will help you to select your best option and maximise your chances of success.

Remember to keep your answer paper (or a scan of it) and your result, and email it to Onlinestudycourse@pearson.com so you can get the best support from your tutor should you choose to enrol on the *Pearson Edexcel GCSE Maths Online Study* course.

Mark scheme

1 **a** 70 **(1 mark)**

b 2100 **(1 mark)**

c 692 **(2 marks** for correct answer**)**
or **1 mark** only for attempt to divide by 3 e.g. 2076 ÷ 3

2 **a** £4.15 **(1 mark** with or without £ symbol**)**

b £6.65 **(1 mark** with or without £ symbol**)**

c £6.25 or 625p **(1 mark)**

d £1.40 or 140p **(1 mark)**

3 **a** 13 **(1 mark)**

b 15 **(1 mark)**

c 45 **(1 mark)**

4 **a** 6 **(1 mark)**

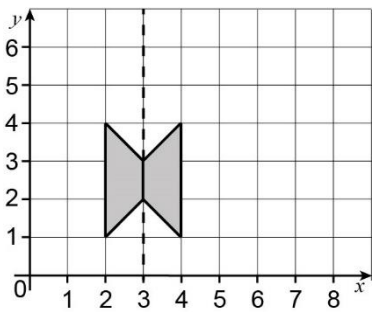
b 12 **(1 mark)**

c 8 **(1 mark)**

5 **a** 58 mm **(1 mark** with or without mm**)**

b bar at July, correct height of 54 mm **(1 mark)**

6

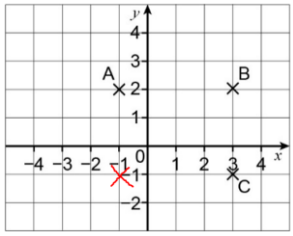


correct reflected shape **(2 marks)**
or **1 mark** only for the correct shape not touching the mirror line

7 **a** (3, 2) **(1 mark)**

b (−1, 2) **(1 mark)**

c Point plotted at (-1, −1)



(1 mark)

8 0.08, 0.27, 0.361, 0.4, 0.613 **(2 marks** for complete correct order**)**
or **1 mark** only for 0.08 first and 0.613 last, but other errors

9 **a** 36 **(1 mark)**

b 42 **(1 mark)**

c 15 **(1 mark)**

d 29 **(1 mark)**

10 **a** 25 m/s **(1 mark** with or without m/s**)**

b 36 km/h **(1 mark** with or without km/h**)**

c 44 m/s ... accept an answer in the range 44 to 45 m/s **(2 marks** with or without m/s**)**
or **1 mark** only if a correct attempt to convert from km/h e.g. 4 × 11 or 2 × 22 (using 40 km/h or 80 km/h)

11 29p or £0.29 **(2 marks)**
or **1 mark** only for 58p seen or 228p seen or 114p seen

12 **a** correct pattern of squares for pattern 4, 1 square added to each vertical column and 1 square added to middle section **(1 mark)**

b

Pattern number	1	2	3	4	5
Number of squares	5	8	11	**14**	**17**

14 **(1 mark)**
17 **(1 mark)**

c ‘add 3 each time’ or equivalent statement **(1 mark)**

d (pattern) 10 **(1 mark)**

13 2 × £19.50 or £39.00 seen **(1 mark)**
201.50 – '39.00' or 162.50 seen **(1 mark)** award 1 mark even if there is a calculation error in the previous step
'162.50' ÷ 12.50 or equivalent **(1 mark)** award 1 mark even if there is a calculation error in the previous steps
13 **(1 mark)**

14 £120 **and** £80 **(3 marks)**
award 1 mark for £200 ÷ 5 (=40) seen
award 1 mark for 3 × 40 (=120) **or** 2 × 40 (=80) seen

15 £1.99 × 80 **(1 mark)**
£5.99 × 24 **(1 mark)**
either £159.20 or £143.76 **(1 mark)**
Option B £5.99 per month contract is cheaper **(1 mark)**

16 a $\frac{12}{16}$ **(1 mark)**

$\frac{18}{24}$ **(1 mark)**

b £26 **(2 marks)**
or **1 mark** only if £65 ÷ 5 × 2 (must be full method) is seen

17 a

	Pass	**Fail**	**Total**
Adults	**24**	**8**	**32**
Teenagers	**16**	**2**	18
Total	**40**	**10**	50

32 **(1 mark)**
8 **and** 24 **(1 mark) (**Award 1 mark for ¾ and ¼ of the number in Adults Total, even if incorrect)
16 **and** 2 **(1 mark)** (Award 1 mark for Teenagers row calculated correctly, even if from incorrect numbers)
40 **and** 10 **(1 mark)** (Award 1 mark for correct calculation, even if from incorrect numbers)

b $\frac{40}{50}$ or equivalent fraction, decimal or percentage e.g. $\frac{4}{5}$, 0.8, 80% **(1 mark)**
1 mark can be awarded if the equivalent values from your table in part a are used to find the percentage

18 £44 × 1.13 = 49.72 euros or 45 euros ÷ 1.13 = £39.82 **(1 mark)**
France **(1 mark)**