## Answers GDS Maths

## Monday GDS averages

The average (mean) is 15.75 km . Or you could have explained that when you divide the sum of the four days by 4 , you get 15 with a remainder and therefore the answer is greater than 15 km .

To increase her average to 17 km , she needs to walk 22 km .
You could have used trial and error.
Or you could have thought, "If she walked every day 17 km , then the average would be 17 km . So what is the difference to 17 every day? The answer to that had to be added to 17 to make up for the shortcoming."

Four numbers:
There is more than one answer.
Possibilities: 2, 4, 4, 6 or 1, 5, 5, 5
$A=30$
$B=50$
$C=20$

## Tuesday GDS triangle challenge

You had to recognise that each triangle has a base of 18 cm and a height of 12 cm . Therefore the area of one triangle is $108 \mathrm{~cm}^{2}$.

## Wednesday Maths GDS alternate and corresponding angles

1a. alternate angles and they are the same size
1 b corresponding angles and they are the same size
2 I tried very hard to put dots into a computer image - and failed. You had several options here, including the angles on the perpendicular lines. Also note that you didn't have to mark all angles; only one pair each.
3 Your explanation has to centre around the fact that the angle on a straight line is $180^{\circ}$ and therefore the three angles together are $180^{\circ}$. The base of the triangle is parallel to the line. By extending the line, you could then have pointed out the alternate and corresponding angles and that they therefore add up to the same amount as the angles on the straight line.

## Thursday Maths GDS Area and Volume

1 Something like this:


3a. $6 \mathrm{~cm}^{2}$
3b. $12 \mathrm{~cm}^{2}$
3c. $216 \mathrm{~cm}^{2}$
3d. $21 \mathrm{~cm}^{2}$

4a. volume $36 \mathrm{~cm}^{3}$ surface area $72 \mathrm{~cm}^{2}$
$4 b$. volume $42 \mathrm{~cm}^{3}$ surface area $82 \mathrm{~cm}^{2}$

## Friday Maths GDS Quadrilaterals

1 This is potentially contentious, depending how much you want to base your answer on Euclid. An oblong is a rectangular object or flat figure with unequal adjacent sides. A rectangle is a parallelogram with right angles, meaning the opposite sides are equal and parallel. According to these two definitions, a square can also be a rectangle but not an oblong.

2 It can have no, two or four right angles, but not three. If it had three right angles, the fourth one would have to be $90^{\circ}$ as well and thus making it a square. And that would make it four (and not three) right angles. $T$
The definition for a trapezium or trapezoid is that it has at least one pair of parallel lines.

3 If you did this activity, take a photo and send it to me via Showbie and I'll check.

