



Test 2

There are **7 questions** in this test. Give yourself **10 minutes** to answer them all.
You may **not** use a calculator for this test.



1. Circle the fraction that is equivalent to the decimal 0.375.

$\frac{3}{8}$

$\frac{3}{16}$

$\frac{1}{4}$

$\frac{375}{100}$

[1]

2. Which of the following is 6 850 000 000 written in standard form?
Circle your answer.

6.85×10^7

6.85×10^9

68.5×10^8

685×10^7

[1]

3. From the list of numbers below, write down two numbers that add together to give a prime number.

11	13	14	15	19
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..... and

[1]

4. Work out the value of $\sqrt{25} + (13 - 5) \times 3$.

5. Files on Ella's laptop are backed up every 15 minutes. Files on her tablet are backed up every 9 minutes. Ella switches her laptop and her tablet on at the same time.

How many minutes will have passed before both back-ups occur at the same time?

..... minutes
[2]

6. Gus is a baker. He buys 8 bags of flour. Each bag contains $3\frac{3}{4}$ kg of flour.
How many kilograms of flour has he bought in total?

..... kg
[2]

7. A rectangle has a width of 6.2 cm. It is twice as long as it is wide. What is the area of the rectangle?

..... cm²
[3]

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- $\frac{3}{8}$ [1 mark]
- 6.85×10^9 [1 mark]
Although 68.5×10^8 and 685×10^7 multiply to give the right number, they're not in standard form as the numbers at the front aren't between 1 and 10.
- 14 and 15 [1 mark]
The pair must involve one even and one odd number so that they add to give an odd number. 14 is the only even number in the list so you can try pairing it with the other four numbers. $14 + 15 = 29$ which is prime.

4. $\sqrt{25} + (13 - 5) \times 3 = 5 + 8 \times 3$
 $= 5 + 24 = 29$

[1 mark for carrying out the operations in the correct order, 1 mark for the correct answer]

5. Multiples of 15: 15, 30, 45, 60, ...
Multiples of 9: 9, 18, 27, 36, 45, ...
So the lowest common multiple of 15 and 9 is 45. The back-ups occur at the same time after 45 minutes.

[1 mark for finding multiples of 15 and 9, 1 mark for identifying the LCM]

6. $8 \times 3\frac{3}{4} = 8 \times \frac{15}{4} = \frac{120}{4} = 30$ kg

[1 mark for a correct method, 1 mark for the correct answer]

7. Length = $6.2 \times 2 = 12.4$ cm
Area = 12.4×6.2
 $12.4 \times 10 = 124$, $6.2 \times 10 = 62$

$$\begin{array}{r} 124 \\ \times 62 \\ \hline 248 \\ +7440 \\ \hline 7688 \end{array}$$

So $12.4 \times 6.2 = 7688 \div 100$
 $= 76.88$ cm²

[1 mark for correctly calculating the length, 1 mark for attempting to calculate 12.4×6.2 or 124×62 , 1 mark for the correct final answer]