

- 25** Mahir picks one number at random from the numbers 5, 10 and 15. He then picks one number at random from the numbers 4, 5 and 6. He adds the two numbers.

The sample space diagram shows some of the possible outcomes.

|               |   | First number |    |    |
|---------------|---|--------------|----|----|
|               |   | 5            | 10 | 15 |
| Second number | + |              |    |    |
|               | 4 |              | 14 | 19 |
|               | 5 |              | 15 | 20 |
|               | 6 |              | 16 | 21 |

- (a) Complete the sample space diagram. [1]
- (b) Given that the total of the two numbers is odd, find the probability that one of the numbers added is 15.

..... [2]

- 26** Write as a single fraction in its simplest form.

(a)  $\frac{mp}{25y} \times \frac{15}{m}$

..... [2]

(b)  $\frac{3}{2x-5} + \frac{4}{x-3}$

..... [3]