1) a) For every **3** apples, there are **2** oranges.

b) The ratio of apples to oranges: **3:2**

c) For every **2** oranges, there are **3** apples.

d) The ratio of oranges to apples: **2:3**

2) a) This is correct.

b) This is incorrect. The ratio of black counters to white counters: 4:3

c) This is incorrect. The fraction of counters that is white is $\frac{3}{7}$.

3) a) For every **3** squares there are **4** triangles and **5** circles.

b) The ratio of squares to triangles: **3:4**

c) The ratio of triangles to squares: **4:3**

d) The ratio of triangles to circles: **4:5**

e) The ratio of circles to triangles: **5:4**

f) The ratio of squares to triangles to circles: **3:4:5**

4) *Answers will vary. Examples answers might include:*
The ratio of apples to bananas: 1:2
The ratio of bananas to oranges: 2:3
The ratio of apples to bananas to oranges: 1:2:3
For every three oranges, there is one apple.
For every two bananas, there are three oranges.

1) a) This is incorrect. There are 3 dogs to every 2 cats.

b) This is incorrect. The ratio of dogs to cats: 3:2

c) This is correct. For every two cats, there are three dogs (2:3).

d) This is incorrect. There are two cats out of five pets altogether. Therefore, $\frac{2}{5}$ of the pets are cats.

2) *Joshua is incorrect. Although he has the correct digits, the actual ratio would be the reverse of the order he has given:*
The ratio of circles to triangles to squares would be 6:5:3.

1) a) *You would need to add 11 blue counters. This would give 12 blue counters and 3 white counters. The ratio of blue counters to white counters: 4:1*

b) *You would need to add 5 blue counters and add 5 white counters. This would give 2 red counters, 6 blue counters and 8 white counters. The ratio of red counters to blue counters to white counters: 1:3:4*

2) *There could be 6 cows and 9 sheep (15 animals in total).*
There could be 8 cows and 12 sheep (20 animals in total).
There could be 10 cows and 15 sheep (25 animals in total).
There could be 12 cows and 18 sheep (30 animals in total).