1) a) For every 1 circle, there are 3 triangles.
b) For every 2 circles, there are 6 triangles.
c) For every 3 circles, there would be 9 triangles.
d) For every 12 triangles, there would be 4 circles.
2) a) For every 3 pentagons, there are 2 triangles and 5 circles.
b) For every 10 circles, I would have 6 pentagons.
c) For every 6 triangles, I would have 9 pentagons.
d) For every 40 shapes, I would have 8 triangles, 12 pentagons and 20 circles.
3) a) For every 1 banana, there are 3 apples.
b) For every 3 bananas, there are 9 apples.
c) For every 21 apples, I would have $\mathbf{7}$ bananas.
d) For every 40 pieces of fruit I would have 10 bananas and 30 apples.
4) a) This could not be true. There are 4 boys for every I girl, therefore there must be more boys in Mrs Hull's class than girls. They cannot be equal in number.
b) This could be true. 1 girl for every 4 boys; 2 girls for every 8 boys; 3 girls for every 12 boys; 4 girls every 16 boys; 5 girls for every 20 boys.
c) This could not be true. The ratio of girls to boys is I girl to every 4 boys. Therefore, I girl for every 4 boys; 2 girls for every 8 boys; 3 girls for every 12 boys; 4 girls for every 16 boys.
There could be more than 13 boys but if there were 13 boys exactly, the ratio of 4 boys for every one girl would not be correct.
5) a) Disagree. There are 3 squares for every Itriangle or 6 squares for every 2 triangles.
b) Partially agree. There would be 9 squares but there would actually be 3 triangles, not 4 .
c) Partially agree. There would be 4 triangles and 8 circles, but there would be 12 squares, not 9 .
6) a) For every 1 pentagon, there are 3 triangles, 2 squares and 4 circles.
b) For every 5 pentagons, there are 15 triangles, 10 squares and 20 circles.
c) For every 70 shapes, there are $\mathbf{7}$ pentagons, 21 triangles, 14 squares and 28 circles.
7) It would take 7 weeks to buy 56 apples therefore they would have bought:

Lemons: 21
Bananas: 70
Oranges: 28
Total: $56+21+70+28=175$

