

## Reasoning and Problem Solving Common Factors

### Developing

- 1a. 20 and 30 – 1, 2, 5, 10  
2a. Carly is not correct. The number 2 is the largest common factor of 14 and 18.  
3a. 2 is not a factor of 3 or 5 so it should not be in the Venn diagram.

### Expected

- 4a. 12 and 18 – 1, 2, 3, 6  
5a. Ella is not correct. The number 8 is the largest common factor of 16 and 24.  
6a. 8 is not a factor of 36 so it should not be in the middle of the Venn diagram. It should only be listed as a factor of 24.

### Greater Depth

- 7a. 50 and 60 – 1, 2, 5, 10; 32 and 56 – 1, 2, 4, 8. Both pairs have 4 common factors.  
8a. Jess is not correct. The number 7 is not a factor of 24. The number 12 is the largest common factor of 24 and 84.  
9a. 11 and 22 are factors of 44 and 132 so should be in the middle of the Venn diagram. 6 is only a factor of 132 so should be in the 'Factors of 132' section.

## Reasoning and Problem Solving Common Factors

### Developing

- 1b. 10 and 20 – 1, 2, 5, 10  
2b. Dean is not correct. The number 5 is not a factor of 12. The largest common factor of 12 and 15 is 3.  
3b. 2 is a factor of 6 and 10 so it should be in the middle of the Venn diagram.

### Expected

- 4b. 16 and 24 – 1, 2, 4, 8  
5b. Benji is not correct. The number 9 is the largest common factor of 54 and 63.  
6b. 11 is a factor of 22 and 66 so it should be in the middle of the Venn diagram.

### Greater Depth

- 7b. 12 and 96 – 1, 2, 3, 4, 6, 12; 60 and 80 – 1, 2, 4, 5, 10, 20. Both have 6 common factors.  
8b. Scott is not correct. The number 28 is the largest common factor of 84 and 140.  
9b. 15 is a factor of both 75 and 135 so it should be in the middle of the Venn diagram. 27 is only a factor of 135 so it should be in the 'Factors of 135' section.