Name: _____ Date: _____

Common factors

Write the answer in the box. Some answers have a pick list.



1 The overlap for “Factors of 20” and “Factors of 30” contains 1, 2, 5, 10, 20. Which card must be moved out of the overlap?

💡 Hint: List the factors of each number. Which ones are in both lists?

_____

2 The overlap for “Factors of 36” and “Factors of 48” contains 1, 2, 3, 4, 6, 12, 36. Which card must be moved out of the overlap?

💡 Hint: List the factors of each number. Which ones are in both lists?

_____

3 Tao says 1 is the only common factor of 16 and 27. Is he right? Show how you know.

💡 Hint: List the factors of each number. Which ones are in both lists?

Write your answer

4 Jo puts 14 outside both circles labelled Factors of 28 and Factors of 42. Is that correct? Give its region and show why.

💡 Hint: List the factors of each number. Which ones are in both lists?

Write your answer

5 The overlap for “Factors of 18” and “Factors of 24” contains 1, 2, 3, 6, 18. Which card must be moved out of the overlap?

💡 Hint: List the factors of each number. Which ones are in both lists?

_____

6 Tao says 1 is the only common factor of 18 and 24. Is he right? Show how you know.

💡 Hint: List the factors of each number. Which ones are in both lists?

Write your answer

7 Choose two different class sizes from 10 to 50, inclusive. Both classes must be able to make full teams of 7. Show the two multiplications.

💡 Hint: List the factors of each number. Which ones are in both lists?

Write your answer

8 Two classes have 12 and 20 pupils. Each class is split into groups of the same size, with at least 2 pupils per group. What is the largest possible group size?

💡 Hint: List the factors of each number. Which ones are in both lists?

_____

9 Two classes have 15 and 25 pupils. Each class is split into groups of the same size, with at least 2 pupils per group. What is the largest possible group size?

💡 Hint: List the factors of each number. Which ones are in both lists?

_____

10 Choose two different class sizes from 10 to 50, inclusive. Both classes must be able to make full teams of 6. Show the two multiplications.

💡 Hint: List the factors of each number. Which ones are in both lists?

Write your answer