

HCF & LCM

Name:

Date:

INQUIRY

Chinese lanterns come in packs of 8. Korean lanterns come in packs of 12. What's the smallest number you need to buy so you have equal amounts?

Discuss with your partner. Write your initial ideas below:

Key Vocabulary

Term	Definition
HCF	Highest Common Factor — largest number dividing both.
LCM	Lowest Common Multiple — smallest number both divide into.

Part A — Calculating

1. Find HCF of: (a) 24 and 36 (b) 30 and 45 (c) 48 and 72. [3 marks]

Show your working:

2. Find LCM of: (a) 6 and 8 (b) 9 and 12 (c) 15 and 20. [3 marks]

Show your working:

Part B — Application

3. Lanterns: Chinese packs of 8, Korean packs of 12. Smallest equal number? [2 marks]

Show your working:

4. Buses from Nanjing station leave every 12 min. Buses to the airport every 18 min. Both just left. When will both leave together again? [2 marks]

Show your working: