## Maths with Melissa

## Highest Common Factor (HCF) Worksheet Find the HCF of 36 and 60.

- 1. Determine the HCF of 84, 210, and 378.
- 2. Two numbers have HCF 18 and LCM 540. If one of the numbers is 54, what is the other number?
- 3. If the HCF of two numbers is 13 and their product is 2028, what is their LCM?
- 4. The HCF of two numbers is 24, and their sum is 168. If one of the numbers is 72, find the other number.
- 5. Find the HCF of 252 and 105 using the prime factorisation method.
- 6. Three ropes of lengths 96 cm, 144 cm, and 192 cm are to be cut into equal pieces with no remainder. What is the greatest possible length of each piece?
- 7. The product of two numbers is 6300 and their HCF is 14. What is their LCM?
- 8. Find the HCF and LCM of 48 and 180, and verify that HCF × LCM = Product of the numbers.
- 9. A teacher wants to distribute 120 pencils and 150 erasers equally among students such that each student gets the same number of pencils and erasers, with none left over. What is the greatest number of students possible?

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## **Answer Key**

- 1. HCF of 84, 210, and 378 is **42**
- 2. The other number is **180**
- 3. LCM is **156**
- 4. The other number is **96**
- 5. HCF of 252 and 105 is **21**
- 6. Greatest possible length is **48 cm**
- 7. LCM is **450**
- 8. HCF = **12**, LCM = **720**;  $12 \times 720 = 8640$ ,  $48 \times 180 = 8640$  (Verified)
- 9. Greatest number of students possible is **30**