

Excellence

1. A student says the lowest common multiple of 4 and 6 is 10. Are they correct? Explain.
2. A student says 36 is the lowest common multiple of 6 and 9. Are they correct? Explain.
3. Write the first 3 common multiples of 6 and 8.
4. Write the first 3 common multiples of 9 and 12.
5. Find the lowest common multiple of 8 and 14.
6. Find the lowest common multiple of 12 and 15.
7. Find the lowest common multiple of 18 and 24.
8. Fill in both blanks: the first two common multiples of 4 and 9 are \square and \square .
9. Fill in the blank: the lowest common multiple of a and 6 is 18 when $a = \square$.

- 10.** Which does not belong: 12, 18, 24, 30 as common multiples of 3 and 6?
- 11.** Which is greater: the lowest common multiple of 6 and 10, or the lowest common multiple of 8 and 12? Show enough working to justify.
- 12.** Three lights flash every 6, 8, and 12 seconds. After how many seconds will they all flash together again?
- 13.** A bus comes every 9 minutes and a train comes every 15 minutes. If they leave now at the same time, after how many minutes will they leave together again?
- 14.** Is 48 a common multiple of 6 and 8? Is it the lowest common multiple? Explain.
- 15.** Complete: if the lowest common multiple of 5 and n is 35, then $n = \underline{\hspace{2cm}}$.

- 16.** Explain why the lowest common multiple of two numbers must be a multiple of both numbers.