

Lesson 6-15 • Catch-up

Reinforce Understanding**6.4–6.15 Catch-Up**

I can show I am caught up on Lessons 6.4–6.15 by using each lesson's big idea in mixed practice.

Worked model

Lesson 6.4 — Write and Evaluate Numerical Expressions with Exponents: Evaluate in this order: grouping symbols, then powers, then multiplication and division left to right, then addition and subtraction left to right.

1. Lesson 6.5 — Write and Evaluate Algebraic Expressions: Words like “each” or “per” mean multiply and attach to the variable; a one-time amount is a constant. Once the variable has a number, substitute it in and evaluate using the order of operations.
2. Lesson 6.6 — Identify Equivalent Algebraic Expressions: Equivalent expressions give the same answer for every value of the variable.
3. Lesson 6.7 — Find Factors and Multiples: GCF = the biggest number that divides BOTH — use it to split into equal groups. LCM = the smallest number BOTH divide into — use it to find when cycles meet again.
4. Lesson 6.8 — Generate Equivalent Expressions: Changing the order or the grouping of numbers being added or multiplied does not change the answer.
5. Lesson 6.9 — Divide Whole Numbers by Fractions: Dividing by a fraction is the same as multiplying by its reciprocal (the fraction flipped over).
6. Lesson 6.10 — Divide Mixed Numbers: Always convert a mixed number to an improper fraction first, then divide using Keep, Change, Flip.
7. Lesson 6.11 — Fraction Division Problem Solving: Total goes first (dividend), group size goes second (divisor): $\text{total} \div \text{group size}$. Then check your answer by multiplying it back.
8. Lesson 6.12 — Least Common Multiple: The LCM is the FIRST number that shows up in both numbers' multiple lists.
9. Lesson 6.13 — Prime Factorization: Keep breaking a number apart until every factor is a prime number you cannot split anymore.
10. Lesson 6.14 — The Distributive Property: The number outside the parentheses gets "shared" with every term inside.
11. Lesson 6.15 — Simplify Algebraic Expressions: Only combine terms that have the same variable part; numbers without a variable combine with each other.

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. (Lesson 6.4) What does 2^3 mean?

Circle the letter of the best answer. Show how you know.

- A. $2 \times 2 \times 2$
- B. 2×3
- C. $2 + 2 + 2$
- D. 3×3

Show your work