Expressions and Equivalence

Quiz 1

Standards 6.NS.C.6a, 6.EE.A.1, 6.EE.A.2c

Learning target I can apply the skills taught so far, show my reasoning, and check my answers.

Assessment 5 open-response questions. Questions 1–1 review Unit 5; the remaining 4 assess this unit. Review accounts for exactly 20% of questions and points.

Administration

0–5 minutes Distribute only the attached student assessment pages. Read directions and confirm students have pencils, rulers, and extra plotting paper when needed. Ask for calculations, models, labels, and explanations where requested.

5–30 minutes Students complete the quiz independently. Follow the course policy of doing arithmetic by hand unless an established classroom accommodation applies.

Final minutes Collect responses and ask students to note one item they want to revisit. Use the remaining time for guided correction and explanation after collecting the initial responses.

Scoring and Feedback

4 points each, 20 total: 2 for method or model, 1 for an accurate result, 1 for requested units, explanation, or check. For a simple item, the final point rewards clear notation.

Score prior-unit review separately from current-unit work. Accept equivalent exact answers and valid alternate methods. For drawings, use the coordinate, face, frequency, or summary information in the attached key to check the representation.

Suggested follow-up based on current-unit items: 80% or above, continue with brief corrections; 60–79%, provide targeted small-group support; below 60%, reteach with models. These are instructional suggestions, not state proficiency cut scores.

Likely misconceptions Watch exponents versus multiplication, operation order, and distributing to every term.

Name _____ Date _____

Expressions and Equivalence

Quiz 1

Standards assessed 6.NS.C.6a, 6.EE.A.1, 6.EE.A.2c

Questions 1–1 review Unit 5 (20%). The remaining questions assess this unit. Show work, simplify exact answers, label units, and justify models or explanations. 4 points per question; 20 points total.

1. [Review] Find the opposite of -2. Show both values on a number line.

2. [Current unit] Write 5^2 as repeated multiplication and evaluate.

3. [Current unit] Write 7^4 as repeated multiplication and evaluate.

4. [Current unit] Evaluate 12 ÷ 2 × 4 + 2^2. Show the intermediate steps.

5. [Current unit] Evaluate 14 ÷ 2 × 6 + 2^2. Show the intermediate steps.

Quiz 1

Expressions and Equivalence

1. 2
Reasoning -2 and 2 are each 2 units from 0 on opposite sides.

2. 5 × 5 = 25
Reasoning The exponent counts 2 factors of 5; multiply all factors.

3. 7 × 7 × 7 × 7 = 2401
Reasoning The exponent counts 4 factors of 7; multiply all factors.

4. 28
Reasoning Use parentheses and exponents first, then × and ÷ left to right, then + and -. Result: 28.

5. 46
Reasoning Use parentheses and exponents first, then × and ÷ left to right, then + and -. Result: 46.