Name: Date:

Section:

# Fractional Exponents and Radicals: Convert, Evaluate, Simplify

## Worksheet response fields

Practice value and reason fields are empty.

| | |
|---|---|
| Worked example: convert, evaluate, check | |
| Exercise 1: convert and state a valid x | |
| Exercise 2: evaluate 64^(2/3) and 64^(-2/3) | |
| Exercise 3: simplify in fractional exponent form | |
| Exercise 4: simplify as radical and fractional exponent | |

# Fractional Exponents and Radicals: Convert, Evaluate, Simplify

Original tasks 1, 2, 3 / blank responses

Task 1

Convert the fifth root of x^3 to fractional exponent form and state one value of x for which the expression is defined.

Task 2

Evaluate 64^(2/3) and 64^(-2/3). Show the order you used.

Task 3

Simplify the square root of 72 times the cube root of 72, leaving the answer in fractional exponent form.

# Fractional Exponents and Radicals: Convert, Evaluate, Simplify

Original tasks 4 / blank responses

Task 4

Simplify the cube root of 54 divided by the cube root of 2, and write the result as a radical and as a fractional exponent.