Fractions and Decimals, Forward and Backward

Title opinions speak in fractions. Division orders speak in decimals. Move between the two without losing a penny.

Forward: fraction to decimal

Divide the top number by the bottom. Carry every interest to **8 places**.

```
3/16 = 3 / 16 = 0.18750000
```

Round once, at the end

An owner with 1/3 of a 1/6 royalty.

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Rounded at each step: 0.3333 x 0.1667 = 0.05556 (about)
Fractions first: 1/3 x 1/6 = 1/18 = 0.05555556
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Multiply the fractions first, then convert. Rounding at every step stacks up errors.

Backward: decimal to fraction

Multiply by common denominators until you land on a whole number.

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0.046875 x 64 = 3, so 0.046875 = 3/64 (for example, 1/16 of a 3/4 interest)
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The fraction tells you where the number came from. That is how I check someone else's decimal.

Know these by heart

Fraction	Decimal	Fraction	Decimal
1/8	0.12500000	1/5	0.20000000
3/16	0.18750000	1/4	0.25000000
1/16	0.06250000	1/6	0.16666667
1/32	0.03125000	1/3	0.33333333

The final test

☐ Add up the column: every owner's decimal in the tract totals the whole

☐ If 8-place rounding leaves a hundred-millionth over or short, show it and note it; never hide it in someone's decimal

Example names and numbers are for illustration. General education only, not legal, tax or financial advice. I am not an attorney; talk to a licensed attorney in your state about your situation.