

Percentages Check-In: Fractions, Decimals and Percentages

FA-PFD-1 quiz formative due: Following lesson (after "Percentage, fractions and decimals")

A 15-minute formative check-in quiz run in the lesson following "Percentage, fractions and decimals". Ten items ramp from reading the hundred grid and benchmark conversions through placing values on a number line and ordering mixed sets, to a discount comparison and a different-wholes error analysis. No calculators; hundred grids permitted. Results sort students into consolidate / extend groups and evidence WA6MNAUN5.

Task

Show what you know about percentages, fractions and decimals. You may use a hundred grid. Remember: three names, one amount — show the hundredths step in your conversions.

Part A — What per cent means

Q1. A hundred grid has 60 squares shaded. Write the amount three ways.

Fraction: _____ Decimal: _____ Percentage: _____

Q2. Write 8% as a fraction and a decimal.

Fraction: _____ Decimal: _____

Part B — Benchmark conversions

Q3. Complete the table.

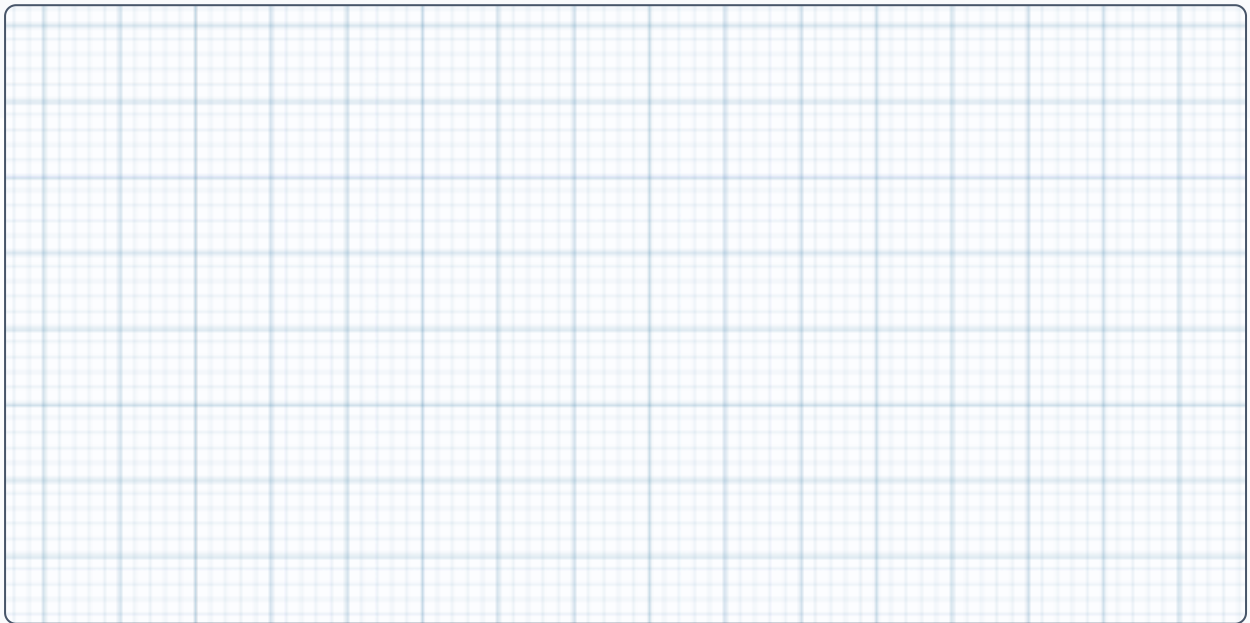
Percentage		Fraction (simplest form)	Decimal
25%			
50%			
10%			

Q4. Convert $\frac{4}{5}$ to a percentage. Show the hundredths step.

Working: _____ Answer: _____

Part C — The number line and ordering

Q5. Draw a 0–1 number line and place these three values on it: 75% , 0.1 , $\frac{1}{2}$.



Q6. Circle the larger value: 0.3 or $\frac{1}{4}$. Show the conversion you used.

Working: _____

Q7. Order smallest to largest: 0.35 , $\frac{3}{10}$, 50% , 0.06

Order: _____

Part D — Percentages in context

Q8. The same \$60 skateboard is on sale in two shops: Shop A offers 25% off, Shop B offers 50% off. Which shop is cheaper, and what fraction of the price do you save there? Answer in a sentence.

Q9. Ava says $9\% = 0.9$. Explain the mistake Ava made and show the correct decimal using "out of 100".

Q10. Tom's glass holds 300 mL and is 50% full. Nia's jug holds 1000 mL and is 25% full. Tom says he has more drink because $50\% > 25\%$. Is Tom right? Explain what percentages always depend on.

[illegible]

Rubric criteria (weights as a percentage of this assessment)

Criterion	Weight	Descriptor
Context, reasoning and error analysis	25%	Applies percentage-fraction connections in context (discount comparison), diagnoses conversion errors using "out of 100" reasoning, and explains that a percentage depends on the size of the whole (Q8–Q10).
Converting between the three forms	25%	Converts between percentages, fractions and decimals for benchmark values, showing the hundredths step and simplest-form fractions (Q3–Q4).
Number line placement and ordering	25%	Places percentages, fractions and decimals accurately on a 0–1 number line, and compares and orders mixed sets by converting to a common form (Q5–Q7).
Percentage as a ratio out of 100	25%	Reads and writes percentages as ratios out of 100, expressing a shaded hundred grid and single-digit percentages correctly in all three notations (Q1–Q2).