Fractions, Decimals & Percentages

Gold

These Gold questions require multi-step reasoning combining fractions, decimals and percentages.

Name: _____ Date: _____

Section A: Conversion Reasoning

1. Order these, largest first: 7/10, 68%, 0.072, 0.72

2. A number is between 0.6 and 0.7 as a decimal. Give one fraction and one percentage this could also be written as.

3. Explain why 1/3 cannot be written as an exact decimal.

4. Write 5/6 as a percentage, rounded to one decimal place.

5. A pie chart shows 3/8 of votes for one option. What percentage is this?

Section B: Applying to Problems

1. A shop increases a price by 10%, then later reduces the new price by 10%. Is the final price the same as the original? Explain your reasoning.

2. If 3/5 of a school's 400 pupils walk to school, how many do not walk?

3. An item is reduced by 30% to £42. What was the original price?

4. A recipe uses 2/5 flour and the rest is a mix of other ingredients in equal parts of sugar and butter. If there is 800g in total, how much sugar is there?

5. Two discounts are offered on a £100 item: 20% off, or £15 off then a further 10% off. Which is the better deal, and by how much?