Fractions

Applications of Mathematics Exam Questions

(1)	Write the following values in order from greatest to least. $$0\cdot388, \quad \frac{3}{8}, \quad 38\cdot38\%, \quad 0\cdot39$$ Justify your answer.

Source: 2019 P1 Q6 N5 Applications of Mathematics

(2)	A basic cookie dough mix requires butter, sugar, flour and chocolate chips. • $\frac{1}{6}$ of the mix is butter • $\frac{1}{3}$ of the mix is sugar • $\frac{1}{4}$ of the mix is chocolate chips • The rest of the mix is flour Calculate the fraction of the mix that is flour.

Source: 2019 P1 Q10 N5 Applications of Mathematics

(3) Guests at a wedding were asked to choose their main course.

- $\frac{3}{7}$ of the guests chose chicken

- $\frac{1}{3}$ of the guests chose beef

- the remaining guests chose the vegetarian option.

Calculate the fraction of guests that chose the vegetarian option.

Source: 2018 P1 Q5 N5 Applications of Mathematics

(4) A class of pupils were asked about how they travelled to school on a particular day.

- $\frac{1}{6}$ of the pupils were driven to school in a car.

- $\frac{2}{5}$ of the pupils took the bus.

- The rest of the pupils walked to school.

Calculate the fraction of pupils who walked to school.

Source: Specimen P1 Q8 N5 Applications of Mathematics

(5)	Carol knows that she can travel 280 miles on a full tank of fuel. She is making a trip of 110 miles. The diagram below shows the car's fuel gauge Full Empty Does she have enough fuel to make the journey? Show working to justify your answer.

Source: 2015 P1 Q1 N5 Lifeskills

(6)	Dave and Elaine each have the same monthly data allowance on their mobile phone contract. Dave has used $\dfrac{4}{7}$ of his monthly data allowance. Elaine has used $\dfrac{5}{8}$ of her monthly data allowance. Who has used the most data? Give a reason for your answer.

Source: Specimen P1 Q1 N5 Lifeskills