

Deciding which of two fractions is larger

The easiest way is to use your calculator to convert both fractions to decimals.

Example: Which is larger, $\frac{5}{8}$ or $\frac{8}{13}$?

$$\frac{5}{8} = 0.625 \quad \frac{8}{13} = 0.6154 \text{ (4 dp)} \quad 0.625 > 0.6154 \quad \therefore \frac{5}{8} \text{ is larger}$$

Is greater than

Convert the following fractions to decimals and highlight the larger one.

1 $\frac{1}{3} =$ _____ $\frac{3}{10} =$ _____ 2 $\frac{1}{4} =$ _____ $\frac{4}{15} =$ _____

3 $\frac{4}{7} =$ _____ $\frac{6}{11} =$ _____ 4 $\frac{2}{3} =$ _____ $\frac{8}{13} =$ _____

5 $\frac{2}{5} =$ _____ $\frac{5}{13} =$ _____ 6 $\frac{19}{24} =$ _____ $\frac{3}{4} =$ _____

7 $\frac{5}{6} =$ _____ $\frac{17}{20} =$ _____ 8 $\frac{10}{11} =$ _____ $\frac{9}{10} =$ _____

Answer the following questions, and justify your answers.

- 9 Dan got 20 questions correct out of 30 in his science test, and 7 questions correct out of 11 in his maths test. In which subject did he do better?
- _____
- _____
- 10 Avocados were five for \$2.00 at a market stall, and seven for \$3.00 at the supermarket. Where were they cheapest?
- _____
- _____
- 11 The local cinema sells books of five tickets for \$49.95. The city cinema sells books of eight tickets for \$75. At which cinema are the tickets cheapest?
- _____
- _____
- 12 A 1.5 kg bag of flour costs \$2.79, and a 5 kg bag costs \$10.99. Which bag contains cheaper flour?
- _____
- _____

Fractions of an amount

Find $\frac{2}{3}$ of 54: $\frac{2}{3}$ of 54 = $\frac{2}{3} \times 54$
= 36

'of' means multiply

Find $\frac{1}{5}$ of \$95: $\frac{1}{5}$ of \$95 = $\frac{1}{5} \times 95$
= \$19

Don't forget the units

Answer the following questions.

- 1 $\frac{1}{3}$ of 156 kg 2 $\frac{4}{5}$ of 315 mL 3 $\frac{1}{2}$ of \$89
- _____
- 4 $\frac{5}{7}$ of 133 km 5 $\frac{1}{4}$ of 96 m 6 $1\frac{2}{3}$ of 177 cm
- _____
- 7 $2\frac{1}{5}$ of 46.5 g 8 $\frac{8}{3}$ of \$93 9 $\frac{3}{10}$ of 236 kg
- _____
- 10 $\frac{2}{5}$ of 85% 11 $\frac{5}{4}$ of 252.8 L 12 $\frac{7}{7}$ of 58 km
- _____
- 13 $\frac{1}{3}$ of 1704 cm 14 $\frac{3}{4}$ of $\frac{1}{2}$ 15 $\frac{1}{3}$ of 0.26
- _____
- 16 Five students drive to Dunedin, and share the cost of the fuel. If the fuel cost \$52.90, how much did each student pay?
- _____
- 17 Two families, one of three people and one of five people, hire a bach for \$196 per night. If the cost is shared equally among the eight people, how much will it cost the family of three per night?
- _____
- 18 Scott ate $\frac{1}{6}$ of a cake. Mel then ate $\frac{3}{10}$ of what was left. What fraction of the entire cake did Mel eat?
- _____
- 19 Uncle Scrooge's will states that one third of his estate goes to the cat. The remainder is to be shared equally between his five nieces. What fraction of his estate does each niece inherit?
- _____
- 20 Pania ate a quarter of the pizza. Pita ate one sixth of what remained. Paula ate two fifths of what remained after Pita had eaten. What fraction of the pizza was left for Penny?
- _____