

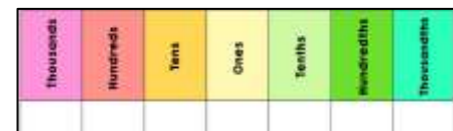
Section 1

Decimals

Key Vocabulary

- Integer
- Tenths
- Hundredth
- Thousandths
- Decimal point
- Place holder

Place value



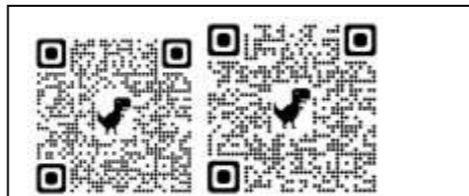
Value of each digit in a decimal number has a different value – tenths, hundredth, thousandths (3 decimal places)

Tenths are 10 times the size of hundredths and one-tenth the size of ones ($0.01 \times 10 = 0.1$, $1 \div 10 = 0.1$).

Rounding

1. Underline the place being rounded.
2. Look to the number to the right.
3. 5 or higher – raise the underlined number.
4. 4 or lower keep the underlined number the same.

Adding and subtracting decimals



Follow the QR codes and watch the videos for more.

Make sure you still use a metacognitive strategy to remember the information.

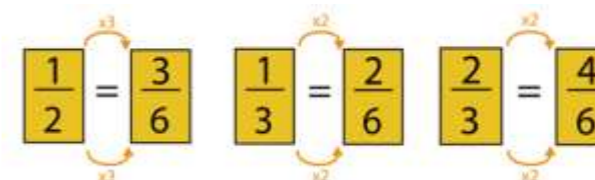
Section 2

Multiply and divide by 10, 100, 1000



Section 3 Fractions

To find the **equivalent fraction**, we multiply the numerator and denominator by the same number and the new fraction will be equivalent to the first fraction.



You can **simplify a fraction** if the numerator (top number) and denominator (bottom number) can both be divided by the same number = using factors

$$\frac{6}{12} \div 6 = \frac{1}{2}$$

When the denominators of two or more fractions the same, they are **Common Denominators**.

To express fractions in the same denominator, you need to find the **lowest common multiple**.

The LCM is found by listing the multiples of each number and circling any common multiples. The lowest one is the LCM.

Section 4 Adding and subtracting fractions

Remember!
The denominators need to be equal before adding.

To add multiple fractions, find the first common multiple of the denominators.

Section 5

Multiplying pairs of fractions

$$\frac{3}{4} \times \frac{2}{3}$$

- 1) Multiply the numerators $\frac{3}{4} \times \frac{2}{3} = \frac{6}{12}$
- 2) Multiply the denominators
- 3) Simplify the answer if you can. $\frac{6}{12} = \frac{1}{2}$

Multiplying fractions by whole numbers

$$\frac{3}{4} \times 5$$

- 1) Write the whole number as a fraction over 1. $\frac{3}{4} \times \frac{5}{1}$
- 2) Multiply the numerators $\frac{3}{4} \times \frac{5}{1} = \frac{15}{4}$
- 3) Multiply the denominators
- 4) Change any improper fractions back to mixed numbers. $\frac{15}{4} = 3\frac{3}{4}$
- 5) Simplify the answer if you can.

When multiplying mixed numbers, you can either partition them into wholes and parts, multiplying each of them by the integer, or convert the mixed number to an improper fraction and multiply the numerator by the integer.

Section 6

Find fractions of numbers

$\frac{3}{4}$ of 48

- 1) Divide the whole number by the denominator. ($48 \div 4 = 12$)
- 2) Multiply the answer by the numerator ($12 \times 3 = 36$)

$48 \div 4 = 12$
dividing by 4 finds one quarter.

$12 \times 3 = 36$
multiplying by 3 finds 3 quarters

$$\frac{1}{2} = \text{numerator} = \text{denominator}$$

The numerator represents the number of those parts that are selected.
The denominator is the number of parts the whole is divided into.

Key Questions

- What does 3 decimal places mean?
- What's the role of a zero in decimal numbers?
- When dividing by 1000 what happens to the digits?
- What does it mean to simplify a fraction?
- What do you use to simplify fractions?
- What does equivalent fractions mean?
- What do you use to find equivalent fractions?
- What does common denominator mean?