

Mathematical vocabulary

Let's look at some of the words you'll be using this term...

Key Words	Definition	Examples
Percent	One part of every one hundred.	5 out of 100 is the same as 5% 13% means 13 out of 100
Integer	A whole number.	$5, 5.0, \frac{5}{1}$ (integers) $5.1, \frac{5}{2}$ (non-integers)
Discount	A reduction in price.	A jacket that normally costs £70 but is on sale for £60 has a discount of £10.
Profit	Extra money that is made on top of how much it costs.	If I bought something for £30 and then sell it for £40, I will make £10 profit.
Interest	Extra money that you get for having money in a savings account, or extra money that you pay when you borrow.	If I leave £3000 in a savings account for a full year, the bank may give me an extra £50 interest.
Notation for money	Money is in pounds and pence, so you need to write numbers to two decimal places.	$£23.50, £18.75$ (correct) $£23.5, £18.748$ (incorrect)

Facts, formulae and procedures

Let's review some of the facts, formulae and procedures that you've learned in the past...

To multiply a fraction by a fraction:

Step 1: Multiply the numerators.

Step 2: Multiply the denominators.

Step 3: Simplify your answer, if you can.

$$\frac{3}{8} \times \frac{2}{5} = \frac{3 \times 2}{8 \times 5} = \frac{6}{40} = \frac{3}{20}$$

To divide a fraction by a fraction:

Dividing is the same as multiplying by its reciprocal.

Step 1: Change the second fraction to its reciprocal.

Step 2: Change the multiplication to a divide.

Step 3: Multiply them.

$$\frac{3}{8} \div \frac{2}{5} = \frac{3}{8} \times \frac{5}{2} = \frac{3 \times 5}{8 \times 2} = \frac{15}{16}$$

Number Facts

Square numbers:

$1 \times 1 = 1$

$2 \times 2 = 4$

$3 \times 3 = 9$

$4 \times 4 = 16$

$5 \times 5 = 25$

$6 \times 6 = 36$

$7 \times 7 = 49$

$8 \times 8 = 64$

$9 \times 9 = 81$

$10 \times 10 = 100$

$11 \times 11 = 121$

$12 \times 12 = 144$

$13 \times 13 = 169$

$14 \times 14 = 196$

$15 \times 15 = 225$