Equivalent Fractions Homework

 No calculator!

Literacy

$\frac{5}{7}$ ← **Numerator** (*number*)

$\frac{5}{7}$ ← **Denominator** (*name/type*)

The **denominator** tells you the **size of the slice** (how many a whole one has been cut into)
The **numerator** tells you the **number of slices**
$\frac{5}{7}$ means **5** slices, where each slice is a **seventh**.

An **equivalent** fraction is one with **equal value**.

Research

Where does the word 'fraction' originally come from?

Why do you think this word was chosen to describe this type of number?

Memory

- To find an **equivalent** fraction, **multiply or divide** the top and bottom by the **same thing**.
- To **simplify** a fraction, **divide** the top and bottom by the same thing, and **keep going** until you can't divide any more. This is the equivalent fraction that uses the smallest numbers.

Skills

Convert these fractions to equivalent fractions by filling in the gaps:

1) $\frac{4}{5} = \frac{8}{[\ ]}$

2) $\frac{12}{17} = \frac{120}{[\ ]}$

3) $\frac{7}{3} = \frac{[\ ]}{15} = \frac{[\ ]}{30}$

Simplify these fractions fully:

4) $\frac{12}{30} =$

5) $\frac{42}{60} =$

6) $\frac{9000}{27000} =$

Show ALL your working.

Stretch

1) Convert these fractions into equivalent fractions with denominator 12:

$\frac{3}{4} = \frac{[\ ]}{12}$ $\frac{2}{3} = \frac{[\ ]}{12}$

2) Which fraction is larger, $\frac{3}{4}$ or $\frac{2}{3}$?

3) Which fraction is larger, $\frac{2}{5}$ or $\frac{1}{3}$?

You need to **read** and **learn** the ***Literacy*** and ***Memory*** sections, **look up** answers to the ***Research*** section, **answer all** questions from the ***Skills*** section, and (unless you have already spent more than 45 minutes on this homework) **attempt** the ***Stretch*** section. Answers can be written on the sheet or in your book if you need more space.

Equivalent Fractions Homework SOLUTIONS

No calculator!

Literacy

$\frac{5}{7}$ ← **Numerator** (*number*)

$\frac{5}{7}$ ← **Denominator** (*name/type*)

The **denominator** tells you the **size of the slice** (how many a whole one has been cut into)
The **numerator** tells you the **number of slices**
$\frac{5}{7}$ means **5** slices, where each slice is a **seventh**.

An **equivalent** fraction is one with **equal value**.

Research

Where does the word 'fraction' originally come from?
Latin: 'fractio' meaning 'to break into pieces' (like 'fracture')
Why do you think this word was chosen to describe this type of number?
A fraction is what you get when you break a whole number into pieces.

Memory

- To find an **equivalent** fraction, **multiply or divide** the top and bottom by the **same thing**.
- To **simplify** a fraction, **divide** the top and bottom by the same thing, and **keep going** until you can't divide any more. This is the equivalent fraction that uses the smallest numbers.

Skills

Convert these fractions to equivalent fractions by filling in the gaps:

1) $\frac{4}{5} = \frac{8}{[10]}$

2) $\frac{12}{17} = \frac{120}{[170]}$

3) $\frac{7}{3} = \frac{[35]}{15} = \frac{[70]}{30}$

Simplify these fractions fully:

4) $\frac{12}{30} = \frac{2}{5}$

5) $\frac{42}{60} = \frac{7}{10}$

6) $\frac{9000}{27000} = \frac{1}{3}$

Show ALL your working.

Stretch

1) Convert these fractions into equivalent fractions with denominator 12:

$\frac{3}{4} = \frac{[9]}{12}$ $\frac{2}{3} = \frac{[8]}{12}$

2) Which fraction is larger, $\frac{3}{4}$ or $\frac{2}{3}$?
$\frac{3}{4}$ (more twelfths)

3) Which fraction is larger, $\frac{2}{5}$ or $\frac{1}{3}$?
$\frac{2}{5} = \frac{6}{15}$ and $\frac{1}{3} = \frac{5}{15}$ so $\frac{2}{5}$ is larger (more fifteenths)

You need to **read** and **learn** the ***Literacy*** and ***Memory*** sections, **look up** answers to the ***Research*** section, **answer all** questions from the ***Skills*** section, and (unless you have already spent more than 45 minutes on this homework) **attempt** the ***Stretch*** section. Answers can be written on the sheet or in your book if you need more space.