

Fractions and percentages added or subtracted

Which of these is the better deal.

A jumper which cost £40 was increased by 11%

A jumper which cost £50 has 15% taken off in a sale

A jumper which cost £44 has  $\frac{2}{11}$  of its value added on

A jumper is now  $\frac{3}{5}$  of its original price of £60

Now try this:

In a school there are 800 people.

$\frac{3}{10}$  of these are boys

40% of the boys have brown hair

$\frac{5}{6}$  of the boys who have brown hair play football

How many boys with brown hair play football?

Work sheet:

Objective: Fractions and percentages of amounts

Part 1)

Find:

$\frac{1}{5}$ of 50	$\frac{1}{7}$ of 49	$\frac{3}{8}$ of 32	$\frac{2}{11}$ of 33
$\frac{3}{4}$ of 44	$\frac{5}{12}$ of 48	$\frac{5}{6}$ of 54	$\frac{9}{5}$ of 45

Part 2)

Find:

$\frac{1}{7}$ of 700	$\frac{3}{5}$ of 80	$\frac{2}{3}$ of 60	$\frac{5}{2}$ of 40
$\frac{11}{3}$ of 9	$\frac{7}{4}$ of 20	$\frac{2}{45}$ of 90	$\frac{33}{2}$ of 14

Part 3)

If  $\frac{3}{8}$  of a test is equal to 6 points, what do the following fractions represent?

$\frac{1}{8}$	$\frac{2}{8}$	$\frac{7}{8}$	$\frac{1}{16}$
$\frac{5}{16}$	$\frac{1}{2}$	Whole test	$\frac{3}{4}$

Part 4)

Find:

10% of 70	30% of 20	13% of 80	22% of 30	10% of 45	20% of 72
42% of 300	2% of 4	20% of 6	22% of 6	18% of 13	81% of 400

Part 5) Word problem

There are 500 people in a school.  $\frac{3}{10}$  of the school are girls.  $\frac{1}{3}$  of the girls wear glasses.  $\frac{3}{5}$  of the girls who wear glasses have brown hair.

- a) How many girls are there?      b) How many girls wear glasses
- c) How many of these girls have brown hair

Part 6) There are 1000 students in a school.  $\frac{3}{5}$  of the school are boys.  $\frac{1}{8}$  of the girls have blond hair.  $\frac{7}{10}$  of these girls with blond hair play hockey.

How many blond haired girls who play hockey are there?