

SMART EXAM RESOURCES
0580 IGCSE MATH EXTENDED

TOPIC: NUMBERS

SUB-TOPIC: SUMS INVOLVING MIXED NUMBERS AND FRACTIONS

SET-3-QP-MS

- 1 Without using your calculator, work out $\frac{3}{8} \div 2\frac{1}{4}$.

You must show all your working and give your answer as a fraction in its simplest form.

..... [3]

MARK SCHEME:

$\frac{3}{8} \times \frac{4}{9}$ oe or $\frac{3}{8} \div \frac{18}{8}$ oe with common denominator	M2	B1 for $\frac{9}{4}$ oe seen or M1 for $\frac{3}{8} \times$ <i>their</i> $\frac{4}{9}$
$\frac{1}{6}$ cao	A1	

2 **Without using a calculator**, work out $\frac{5}{16} \times 1\frac{1}{7}$.

You must show all your working and give your answer as a fraction in its simplest form.

..... [2]

MARK SCHEME:

$\frac{5}{16} \times \frac{8}{7}$	M1	
$\frac{5}{14}$ cao	A1	

03 Without using a calculator, work out $3\frac{5}{8} - 1\frac{2}{3}$.

You must show all your working and give your answer as a mixed number in its simplest form.

..... [3]

MARK SCHEME:

$\frac{29}{8}$ or $\frac{5}{3}$	$2\frac{5}{8} - \frac{2}{3}$	M1	Allow $\frac{29k}{8k}$ or $\frac{5k}{3k}$ Correct step for dealing with mixed numbers
$\frac{87}{24}$ and $\frac{40}{24}$	[2] $\frac{15}{24}$ and $\frac{16}{24}$	M1	Correct method to find common denominator e.g. $3\frac{15}{24}$ and $1\frac{16}{24}$
$1\frac{23}{24}$ cao		A1	

04 **Without using your calculator**, work out $1\frac{5}{6} + \frac{9}{10}$.

You must show your working and give your answer as a mixed number in its simplest form.

Answer [3]

MARK SCHEME:

$\frac{55}{30} + \frac{27}{30}$ oe or (1) $\frac{25}{30} + \frac{27}{30}$ oe	M1	for denominator of $30k$
$\frac{82}{30}$ oe or (1) $\frac{52}{30}$ oe	M1	for denominator of $30k$ dependent on previous M1
$2\frac{11}{15}$ M2 must be scored	A1	If M0 scored then SC1 for common denominator of $30k$ seen