

STAGE 9 MATHEMATICS

TOPIC QUESTIONS

TOPIC: FRACTIONS, DECIMALS, PERCENTAGES

SET-2

1.

Without using a calculator, work out $\frac{1}{3} + \frac{5}{6}$.

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

..... [2]

MARK SCHEME 1:

| | | |
|--------------------------------|-----------|---|
| $\frac{2}{6} + \frac{5}{6}$ oe | M1 | i.e. correct fractions with common denominator $6k$ |
| $1\frac{1}{6}$ cao | A1 | |

2

- (a) Put a ring around the fraction that is equivalent to $\frac{7}{12}$.

$$\frac{35}{62} \quad \frac{20}{36} \quad \frac{49}{84} \quad \frac{82}{144} \quad \frac{64}{110}$$

[1]

- (b) Write these numbers in order, starting with the smallest.

$$\frac{7}{12} \quad 0.6 \quad 58\% \quad \frac{8}{13} \quad \frac{2}{3}$$

..... < < < < [2]
smallest

- (c) Write 0.724 as a fraction in its simplest form.

..... [1]

MARK SCHEME 2:

| | | | |
|-----|--|----------|---|
| (a) | $\frac{49}{84}$ | 1 | |
| (b) | 58% $\frac{7}{12}$ 0.6 $\frac{8}{13}$ $\frac{2}{3}$ | 2 | B1 for 4 in correct order or M1 for 0.583[...], [0.6], 0.58, 0.615[...] or 0.61 or 0.62, 0.66[...] or 0.67 or 0.667 or 0.7 oe |
| (c) | $\frac{181}{250}$ cao | 1 | |

3.

Without using a calculator, work out $2\frac{5}{8} \times \frac{3}{7}$.

Show all your working and give your answer as a mixed number in its lowest terms.

..... [3]

MARK SCHEME:3

| | | |
|--------------------------------------|-----------|---|
| $\frac{21}{8} \times \frac{3}{7}$ oe | M1 | Must be shown |
| $1\frac{1}{8}$ cao final answer | A2 | A1 for $\frac{9}{8}$ oe e.g. $\frac{63}{56}$ |

4.

Work out $\frac{2}{3} - \frac{1}{4}$, giving your answer as a fraction in its lowest terms.

Do not use a calculator and show all the steps of your working.

.....[2]

MARK SCHEME 4:

| | | |
|--------------------------------------|-----------|---|
| $\frac{8}{12}$ and $\frac{3}{12}$ oe | M1 | Correct fractions with common denominator |
| $\frac{5}{12}$ cao | A1 | |

5.

Write as a single fraction.

$$1 - \frac{2}{p} - \frac{3}{t}$$

..... [2]

MARK SCHEME: 5

| | | | |
|--|------------------------------------|----------|--|
| | $\frac{pt-2t-3p}{pt}$ final answer | 2 | B1 for $pt-2t-3p$ or $1-\frac{2t+3p}{pt}$ |
|--|------------------------------------|----------|--|