SMART EXAM RESOURCES
0580 EXTENDED MATH
TOPIC: NUMBERS
SUB-TOPIC: FRACTIONS
CONVERT RECURRING FRACTIONS TO DECIMALS
SET-1-QP-MS

1 Write the recurring decimal $0.\dot{7}$ as a fraction.

.... [1]

MARK SCHEME:

$\dfrac{7}{9}$	**1**	

2 Write the recurring decimal $0.4\dot{7}$ as a fraction.
Show all your working.

.... [2]

MARK SCHEME:

$47.77\ldots - 4.77\ldots$ oe	**M1**	
$\dfrac{43}{90}$	**A1**	Allow equivalent fractions If **M0** then **SC1** for $\dfrac{43}{90}$ or equivalent fraction with no/insufficient working

3   Write the recurring decimal $0.\dot{6}\dot{3}$ as a fraction.

.... [1]

$\dfrac{7}{11}$ oe	**1**	

4 Write the recurring decimal $0.6\dot{3}$ as a fraction in its lowest terms.
You must show all your working.

....[3]

5 Write the recurring decimal $0.3\dot{2}$ as a fraction.
[$0.3\dot{2}$ means $0.3222\ldots$]

.... [2]

6 Write the recurring decimal $0.2\dot{5}$ as a fraction.

[$0.2\dot{5}$ means 0.2555...]

Answer .... [2]

$\dfrac{23}{90}$ oe, must be fraction	**2**	**M1** for $25.\dot{5} - 2.\dot{5}$ oe e.g. $2.55^r - 0.25^r$ or **B1** for $\dfrac{k}{90}$

7 Write the recurring decimal $0.\dot{2}\dot{7}$ as a fraction.

.... [1]

MARK SCHEME:

$\dfrac{3}{11}$ oe fraction	**1**	

8 Write the recurring decimal $0.1\dot{7}$ as a fraction in its simplest form.
You must show all your working.

.... [3]

9 Write the recurring decimal $0.1\dot{5}$ as a fraction.
[$0.1\dot{5}$ means 0.1555...]

Answer .... [2]

MARK SCHEME:

$\dfrac{14}{90}$ oe must be fraction	**2**	**M1** for $15.\dot{5} - 1.\dot{5}$ oe or **B1** for $\dfrac{k}{90}$

10   **(a)** Write \$0.70 as a fraction of \$5.60, giving your answer in its lowest terms.

.... [1]

(b) Write the recurring decimal $0.\dot{1}\dot{8}$ as a fraction in its lowest terms.
[$0.\dot{1}\dot{8}$ means $0.181818\ldots$]

.... [2]

MARK SCHEME:

(a)	$\dfrac{1}{8}$ cao	1	
(b)	$\dfrac{2}{11}$	2	**M1** for $18.\dot{1}\dot{8} - 0.\dot{1}\dot{8}$ oe or **B1** for $\dfrac{2k}{11k}$ (k not 0 or 1)