

SMART EXAM RESOURCES
STAGE 9 MATHEMATICS
TOPIC QUESTIONS
TOPIC: TERMINATING AND RECURRING DECIMALS
SET-2

1. Does $\frac{2}{3}$ have a terminating or recurring decimal equivalent?

MARK SCHEME:

Denominator: 3 (not just 2's or 5's).

Since denominator contains 3, it has a **recurring** decimal.

Decimal: $2/3 = 0.666\ldots$

Answer: **Recurring** (0.666...).

2. Does $\frac{5}{6}$ have a terminating or recurring decimal equivalent?

MARK SCHEME:

Denominator: $6 = 2 \times 3$ (contains 3).

Since denominator includes 3, it has a **recurring** decimal.

Decimal: $5/6 = 0.8333...$

Answer: **Recurring** (0.833...).

3. Does $\frac{7}{9}$ have a terminating or recurring decimal equivalent?

MARK SCHEME:

Denominator: $9 = 3^2$ (not just 2's or 5's).

Since denominator contains 3, it has a **recurring** decimal.

Decimal: $7/9 = 0.777\dots$

Answer: **Recurring** (0.777...).

4. Does $\frac{4}{11}$ have a terminating or recurring decimal equivalent?

MARK SCHEME:

Denominator: 11 (not just 2's or 5's).

Since denominator contains 11, it has a **recurring** decimal.

Decimal: $4/11 = 0.363636...$

Answer: **Recurring** (0.363636...).

5. Does $\frac{1}{7}$ have a terminating or recurring decimal equivalent?

MARK SCHEME:

Denominator: 7 (not just 2's or 5's).

Since denominator contains 7, it has a **recurring** decimal. Decimal:

$$1/7 = 0.142857142857...$$

Answer: **Recurring** (0.142857...).