

SMART EXAM RESOURCES
STAGE 9 MATHEMATICS
TOPIC QUESTIONS
TOPIC: TERMINATING AND RECURRING DECIMALS
SET-1

1. Does $\frac{3}{8}$ have a terminating or recurring decimal equivalent?

MARK SCHEME:

Prime factorize denominator: $8 = 2^3$ (only factors of 2).

Since denominator consists only of 2's, it has a **terminating** decimal.

Decimal: $3/8 = 0.375$.

Answer: **Terminating** (0.375).

2. Does $\frac{7}{25}$ have a terminating or recurring decimal equivalent?

MARK SCHEME:

Prime factorize denominator: $25 = 5^2$ (only factors of 5).

Since denominator consists only of 5's, it has a **terminating** decimal.

Decimal: $7/25 = 0.28$.

Answer: **Terminating** (0.28).

3. Does $\frac{9}{40}$ have a terminating or recurring decimal equivalent?

MARK SCHEME:

Prime factorize denominator: $40 = 2^3 \times 5^1$ (only factors of 2 and 5).

Since denominator consists only of 2's and 5's, it has a **terminating** decimal.

Decimal: $9/40 = 0.225$.

Answer: **Terminating** (0.225).

4. Does $\frac{11}{50}$ have a terminating or recurring decimal equivalent?

MARK SCHEME:

Prime factorize denominator: $50 = 2^1 \times 5^2$ (only factors of 2 and 5).

Since denominator consists only of 2's and 5's, it has a **terminating** decimal.

Decimal: $11/50 = 0.22$.

Answer: **Terminating** (0.22).

5. Does $\frac{125}{200}$ have a terminating or recurring decimal equivalent?

MARK SCHEME:

Simplify: $125/200 = 5/8$.

Prime factorize denominator: $8 = 2^3$ (only factors of 2).

Since denominator consists only of 2's, it has a **terminating** decimal.

Decimal: $5/8 = 0.625$.

Answer: **Terminating** (0.625).