

Degolion Cylchol

1. Cwblhewch y tabl canlynol.

Ffracsiwn	Degolyn	Degolyn cylchol? Ie neu Na	Degolyn terfynus? Ie neu Na
$\frac{2}{5}$			
$\frac{5}{8}$			
$\frac{7}{9}$			
$\frac{2}{11}$			

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[4]

2. (a) Cwblhewch y tabl canlynol. [3]

Ffracsiwn	Degolyn	Cylchol neu terfynus? (recurring or terminating?)
$\frac{1}{3}$	$0.\dot{3}$	
$\frac{5}{8}$		
$\frac{3}{11}$		

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3. (b) Mynegwch $\frac{12}{99}$ fel degolyn cylchol (*recurring*). [2]

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4. (c) Trawsnewidiwch bob un o'r ffracsiynau canlynol yn ddegolyn. Nodwch a yw pob degolyn yn **derfynus** neu'n **gylchol**. Dangoswch eich holl waith cyfrifo. [4]

$$\frac{5}{8}$$

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Degolyn Terfynus neu gylchol?

$$\frac{3}{11}$$

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Degolyn Terfynus neu gylchol?

5. (b) Trawsnewidiwch bob un o'r ffracsiynau canlynol yn ddegolyn a nodwch a yw'r degolyn yn ddegolyn terfynus (*terminating*) neu'n ddegolyn cylchol (*recurring*). Dangoswch eich **holl** waith cyfrifo.

$$\frac{7}{8}$$

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$$\frac{2}{9}$$

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$$\frac{4}{11}$$

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Cynllun Marcio

1.

5.				B4 4	All correct B3 any 3 rows correct or all 4 decimals correct B2 any 2 rows correct or 3 decimals correct B1 any 1 row correct or 2 decimals correct <i>Accept unambiguous intention for Yes/No columns</i> <i>Accept if candidate indicates yes without giving the corresponding no, unless there is a contradiction, and vice versa</i>
Fraction	Decimal	Recurring	Terminating		
2/5	0.4	No	Yes		
5/8	0.625	No	Yes		
7/9	0.77(777...) or 0.78	Yes	No		
2/11	0.18(18..)	Yes	No		

2.

(a) 0.625 $0.2727\ldots$ or $0.2\dot{7}$ Recurring, Terminating, Recurring (b) $\frac{0.27}{5.4}$ or $\frac{0.9}{18}$ or $\frac{0.3}{6}$ or equivalent correct 1 st step $\frac{27}{540}$ or $\frac{9}{180}$ or $\frac{3}{60}$ or 0.05 $\frac{1}{20}$ (c) Method that ' $\dots \times 12 + 56 = 200$, or $\frac{\dots \times 12 + 56}{100} = 2$ Number is 12	B1	FT provided at least 1 of the decimals is correct, i.e. at least B1 previously awarded Allow for sight of 0.27 FT expressing as a fraction (with whole number numerator and denominator) provided equivalent level of difficulty, $2.7/5.4 = 27/54$ or $\frac{1}{2}$ is equivalent level of difficulty (M0, M1, A0) CAO OR 2×100 , then 'their 200' – 56, then 'their 144' $\div 12$, or trial & improvement with correct operations in the correct order CAO
	B1	
	B1	
	M1	
	M1	
	A1	
	M1	
	A1	
	8	

3.

16(a)(i) 0.021	B1	
16(a)(ii) 0.05	B2	B1 for 1/20
16(b) $0.1\dot{2}$	B2	Accept $0.1212\ldots$ or dots as for recurring notation Otherwise B1 for 0.12(1...)
16(c) $35\sqrt{2}$	B2	B1 for $\sqrt{70} = \sqrt{2} \times \sqrt{35}$ seen or implied, OR $7\sqrt{5}\sqrt{10}$ or $5\sqrt{7}\sqrt{14}$

4.

(a) 125	B2	B1 for sight of 5^3 or $78125 \div 625$
(b) Method to evaluate, allow 1 slip in tables	M1	Accept digits 9 1 2 6 with incorrect place value
9.126	A1	
rounded to 9.13	A1	FT 'their 9.126' provided M1 awarded
(c) 0.625	B1	
0.27(27...)	B1	
0.44(44...)	B1	
terminating, recurring, recurring (decimal) stated	B1	FT their responses provided at least B2 already awarded
	9	

5.

5.(a) Method to evaluate, allow 1 slip in tables	M1	Accept digits 5 4 7 3 with incorrect place value
5.473	A1	
rounded to 5.5	A1	FT their 5.473 provided M1 awarded
(b) 0.875	B1	
0.22(22...)	B1	
0.36(36...)	B1	
terminating, recurring, recurring (decimal) stated	B1	FT their responses provided at least B2 already awarded
	7	