Practice Tests Set 24 – Paper 1F mark scheme

Qn	Working	Answer	Mark	Notes
1		84, 105, 171, 233, 490	1	B1
				Total 1 mark

Qn	Working	Answer	Mark	Notes
2		8	1	B1
				Total 1 mark

Qn	Working	Answer	Mark	Notes
3		-1	1	B1
				Total 1 mark

Qn	Working	Answer	Mark	Notes
4		6	1	B1
				Total 1 mark

Qn	Working	Answer	Mark	Notes
5		$3\frac{4}{9}$	1	B1
				Total 1 mark

Qn	Working	Answer	Mark	Notes
6		Acute	1	B1
				Total 1 mark

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Qn	Working	Answer	Mark		Notes
7		*DL*, *DP*, *DR*, *HL*, *HP*, *HR*, *JL*, *JP*, *JR*, *SL*, *SP*, *SR*	2	B2	for all 12 combinations with no extras or repeats If not B2 then B1 for at least 4 correct combinations (ignoring extras and repeats)
					Total 2 marks

Qn		Working	Answer	Mark		Notes
8	(a)		15	1	B1	
	(b)		18	1	B1	
	(c)		16	1	B1	
	(d)		2	1	B1	
	(e)		8 and 18	1	B1	
						Total 5 marks

Qn	Working	Answer	Mark		Notes
9		$6c + 2d$	2	B2	for $6c + 2d$ or $2d + 6c$ (B1 for $6c$ or $2d$)
					Total 2 marks

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Qn		Working / Answer	Mark	Notes
10	(a)		3	B3 Fully correct table If not B3, then B2 for 4 or 5 correct B1 for 2 or 3 correct
	(b)	$\frac{22}{80}$	2	M1
		$\frac{11}{40}$		A1
				Total 5 marks

		apple pie	fruit	ice cream	Total
Year 5		22	6	8	36
Year 6		34	8	2	44
Total		56	14	10	80

Qn		Working	Answer	Mark	Notes
11	(a)		(1, 0)	1	B1
	(b)		Cross marked at (3, −2)	1	B1
	(c)		(−3, −1)	2	B2 for (−3, −1) If not B2 then award B1 for (−3, a) where $a \neq -1$ **or** (b, −1) where $b \neq -3$ **or** (−1, −3)
	(d)		$y = 3$	1	B1
					Total 5 marks

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Qn	Working	Answer	Mark	Notes
12		Octagon	1	B1
				Total 1 mark

Qn	Working	Answer	Mark	Notes
13		360	1	B1
				Total 1 mark

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Qn	Working	Answer	Mark	Notes
14		240	1	B1 Accept 235 - 245
		58	1	B1 Accept 58 -59
	e.g. 950 ÷ 6 or 950 ÷ $\frac{240}{40}$ oe or 50 × 3 + 8 e.g. 170 × 6 or 170 × $\frac{240}{40}$ oe or 300 × 2 + 420 (1 dollar = 6 krone)		2	M1 for a correct method that gives the exchange for 950 Danish krone to dollars or 170 dollars to Danish krone
	Working required	All figures accurate eg 950 Danish krone = 150 - 165 dollars (or clearly showing 170 is enough) or 170 dollars = 1000 - 1040 Danish krone (or clearly showing that 950 is less than 170 dollars) oe		A1
				Total 4 marks

Qn		Working	Answer	Mark	Notes
15	(a)		w^9	1	B1
	(b)		$10m^7p^3$	2	B2 (B1 for 2 terms correct as part of a product)
					Total 3 marks

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Qn		Working	Answer	Mark	Notes
16	(a)		$10x - x^2$	1	B1 oe eg $-x^2 + 10x$
	(b)		$3(2y + 9)$	1	B1
					Total 2 marks

Qn	Working	Answer	Mark	Notes
17	0.28 or $\frac{22}{25}$ or $\frac{\frac{7}{25}+0.88}{2}$ oe		2	M1
	Correct answer scores full marks (unless from obvious incorrect working)	0.58		A1 oe eg $\frac{29}{50}$
				Total 2 marks

Qn	Working	Answer	Mark	Notes
18	$\pm(70 - 8 \times 5)$ or -30 or $70 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5$ oe		2	M1 Could be done in 2 parts
	Correct answer scores full marks (unless from obvious incorrect working)	30		A1
				Total 2 marks

Qn		Working	Answer	Mark	Notes
19	(a)		$9y$	1	B1
	(b)		$12p^2$	1	B1
					Total 2 marks

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Qn	Working	Answer	Mark	Notes
20		0.405, 0.45, 0.5, 0.504, 0.54	1	B1
				Total 1 mark

Qn		Working	Answer	Mark	Notes	
21	(a)		Prism	1	B1	Accept pentagon(al) prism
	(b) (i)		7	1	B1	
	(ii)		10	1	B1	
						Total 3 marks

Qn	Working	Answer	Mark	Notes
22		Chord drawn	1	B1
				Total 1 mark

Qn		Working	Answer	Mark	Notes	
23	(a)		Unlikely	1	B1	Tick at
	(b)		Evens	1	B1	Tick at
	(c)		Impossible	1	B1	Tick at
						Total 3 marks

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Qn	Working	Answer	Mark		Notes
24	eg $7g-2g+3=-5$ **or** $5g+3=-5$ **or** $7g=2g-5-3$ **or** $7g=2g-8$		3	M1	for correctly collecting the terms in g on one side or the numbers on one side
	eg $7g-2g=-5-3$ **or** $5g=-8$			M1	for a correct rearrangement with terms in g on one side and numbers on the other. Award of this mark implies the first M1
	Working required	$-\frac{8}{5}$		A1	(dep on M1) oe eg $-1\frac{3}{5}$ or −1.6
					Total 3 marks

Qn	Working	Answer	Mark		Notes
25	eg $\frac{14}{3}$ **and** $\frac{11}{6}$		3	M1	for both mixed numbers expressed as improper fractions
	eg $\frac{14}{3}\times\frac{6}{11}$ **or** $\frac{28}{6}\div\frac{11}{6}$ **or** $\frac{28n}{6n}\div\frac{11n}{6n}$			M1	seeing this stage gains M2
	eg $\frac{14}{3}\times\frac{6}{11}=\frac{84}{33}=\frac{28}{11}=2\frac{6}{11}$ **or** $\frac{14}{3}\times\frac{6}{11}=\frac{84}{33}=2\frac{18}{33}=2\frac{6}{11}$ **or** $\frac{14}{\cancel{3}^{1}}\times\frac{\cancel{6}^{2}}{11}=\frac{28}{11}=2\frac{6}{11}$ **or** $\frac{14}{3}\div\frac{11}{6}=\frac{28}{6}\div\frac{11}{6}=\frac{28}{11}=2\frac{6}{11}$ **or** correct working to $\frac{28}{11}$ **and** writing $2\frac{6}{11}=\frac{28}{11}$ *Working required*	Shown		A1	dep on M2 for conclusion to $2\frac{6}{11}$ from correct working – either sight of result of multiplication eg $\frac{84}{33}$ must be seen or correct cancelling to $\frac{28}{11}$ or complete method using division and common denominators
					Total 3 marks

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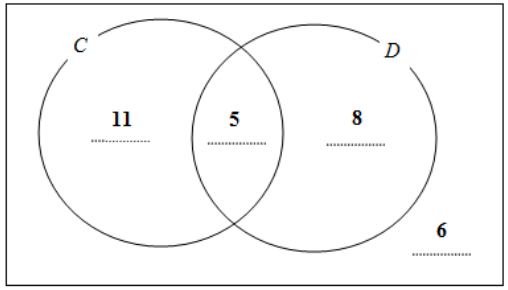
Qn	Working	Answer	Mark	Notes
26		(x =) 3	3	B1
		(y =) 6		B1
		(z =) 10		B1
				Total 3 marks

Qn		Working	Answer	Mark	Notes
27	(a)		Correct Venn diagram	3	B3 for all sections completed correctly If not B3 then award B2 for 3 correct sections B1 for 1 or 2 correct sections
	(b)(i)		$\frac{13}{30}$	1	B1 oe, ft their Venn diagram
	(ii)		$\frac{6}{30}$	1	B1 oe, ft their Venn diagram
					Total 5 marks

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Qn		Working	Answer	Mark		Notes
28	(a)		Triangle drawn at (−1, −3) (−1, −4) (−3, −3)	2	B2	for a correct triangle with correct orientation and position If not B2 then award B1 for a correct triangle drawn with correct orientation in wrong position or triangle drawn with 2 out of 3 correct vertices
	(b)		Triangle drawn at (−4, 4) (−4, 5) (−2, 4)	1	B1	cao
						Total 3 marks

Qn		Working	Answer	Mark		Notes
29	(a)		0.000 0932	1	B1	
	(b)		2.4×10^{5}	2	B2	If not B2, then B1 for 240 000 or 24×10^{4} oe or 2.4×10^{a} $a\neq5$
	(c)		1.8×10^{121}	2	B2	If not B2, then B1 for 18×10^{120} or 1.8×10^{b} $b\neq121$
						Total 5 marks

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Qn	Working	Answer	Mark	Notes
30	x | −2 | −1 | 0 | 1 | 2 | 3 | 4 y | 10 | 7.5 | 5 | 2.5 | 0 | −2.5 | −5	Correct line	3	B3 for a correct line between $x = -2$ and $x = 4$ If not B3 then award B2 for a line segment through at least 3 of (−2, 10), (−1, 7.5), (0, 5), (1, 2.5), (2, 0), (3, −2.5), (4, −5) **or** all points plotted correctly If not B2 then award B1 for at least 2 correct points plotted or stated (may be seen in a table) **or** for a line drawn with a negative gradient through (0, 5) **or** for a line with a gradient of −2.5
				Total 3 marks

Qn		Working	Answer	Mark		Notes
31	(a)	eg $(y \pm 6)(y \pm 3)$ or $y(y + 3) – 6(y + 3)$ or $y(y – 6) + 3(y – 6)$		2	M1	or $(y + a)(y + b)$ where $ab = -18$ or $a + b = –3$ or factorisation which expands to give 2 out of 3 correct terms
		[allow use of x rather than y]	$(y – 6)(y + 3)$		A1	
	(b)		6, −3	1	B1	ft must come from their factors in (a)
						Total 3 marks

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Qn	Working	Answer	Mark	Notes
32	eg $h-4=\frac{m}{2}$ **or** $2h=m+8$		2	M1 for a correct first step
	Correct answer scores full marks (unless from obvious incorrect working)	$m=2(h-4)$		A1 oe eg $m=2h-8$ SC award M1 for $m=2h-4$ **or** $m=h-8$
				Total 2 marks

Practice Tests Set 24 – Paper 1F mark scheme

					Edexcel averages: scores of candidates who achieved grade:						
Qn	Skill tested	Mean score	Max score	Mean %	ALL	5	4	3	2	1	U
1	Integers	0.96	1	96	0.96	0.99	1.00	0.92	0.92	0.86	1.00
2	Decimals	0.92	1	92	0.92	0.95	0.94	0.97	0.82	0.82	0.40
3	Linear equations	0.92	1	92	0.92	0.99	0.99	0.95	0.79	0.64	0.20
4	Linear equations	0.86	1	86	0.86	0.96	0.99	0.81	0.69	0.59	0.00
5	Fractions	0.71	1	71	0.71	0.94	0.87	0.64	0.36	0.05	0.20
6	Angles, lines and triangles	0.78	1	78	0.78	0.91	0.86	0.78	0.58	0.33	0.60
7	Probability	1.74	2	87	1.74	1.94	1.84	1.86	1.50	0.81	0.40
8	Integers	4.18	5	84	4.18	4.82	4.48	4.10	3.16	2.63	1.80
9	Algebraic manipulation	1.60	2	80	1.60	1.92	1.74	1.55	1.21	0.86	0.20
10	Fractions	4.07	5	81	4.07	4.56	4.24	4.19	3.56	2.50	1.00
11	Graphs	3.68	5	74	3.68	4.49	4.13	3.12	3.04	1.81	0.60
12	Polygons	0.77	1	77	0.77	0.94	0.82	0.79	0.55	0.29	0.00
13	Mensuration of 2D shapes	0.74	1	74	0.74	0.92	0.80	0.65	0.45	0.57	0.40
14	Graphs	2.82	4	71	2.82	3.68	3.01	2.55	1.92	1.18	0.40
15	Algebraic manipulation	1.95	3	65	1.95	2.73	2.25	1.68	1.03	0.19	0.20
16	Algebraic manipulation	1.26	2	63	1.26	1.83	1.50	0.96	0.60	0.10	0.00
17	Decimals	1.36	2	68	1.36	1.68	1.45	1.23	1.21	0.55	0.20
18	3D shapes and volume	1.26	2	63	1.26	1.64	1.38	1.09	0.87	0.55	0.00
19	Algebraic manipulation	1.25	2	63	1.25	1.59	1.36	1.16	0.82	0.59	0.40
20	Decimals	0.61	1	61	0.61	0.80	0.68	0.50	0.41	0.27	0.20
21	3D shapes	1.83	3	61	1.83	2.29	2.00	1.63	1.41	0.86	0.40
22	Circle properties	0.65	1	65	0.65	0.84	0.65	0.52	0.55	0.52	0.00
23	Probability	1.79	3	60	1.79	2.26	1.93	1.63	1.31	0.82	0.60
24	Linear equations	1.64	3	55	1.64	2.67	1.89	1.11	0.48	0.05	0.00
25	Fractions	1.50	3	50	1.50	2.42	1.83	1.03	0.22	0.10	0.00
26	Statistical measures	1.68	3	56	1.68	2.54	1.80	1.34	0.69	0.41	0.60
27	Probability	2.76	5	55	2.76	3.60	2.91	2.44	1.93	1.24	0.80
28	Transformation geometry	1.35	3	45	1.35	2.12	1.67	0.79	0.45	0.05	0.00
29	Standard form	2.20	5	44	2.20	3.47	2.23	1.65	0.95	0.55	0.40
30	Graphs	1.15	3	38	1.15	2.35	1.12	0.40	0.15	0.10	0.00
31	Quadratic equations	0.97	3	32	0.97	2.09	0.77	0.37	0.18	0.05	0.00
32	Expressions and formulae	0.62	2	31	0.62	1.20	0.60	0.29	0.12	0.00	0.00
		50.58	**80**	**63**	**50.58**	**67.13**	**54.73**	**43.70**	**32.93**	**20.94**	**11.00**

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Suggested grade boundaries

Grade	5	4	3	2	1
Mark	61	49	38	27	16