

Revision F3 (Topics 1-4) [39] MARKSCHEME

1.

- (a) $6r = 8 - 2$ M1
 1 A1
- (b) $2s$ or 1 seen M1
 $2s = 1$ A1
 $\frac{1}{2}$ or 0.5 A1
 $7s - 5s$ or $3 - 2$ or $5s - 7s$ or $-2s$ or $2 - 3$ or -1
 $-1 = -2s$
- (c) $12 - y = 3 \times 5$ M1
 $12 - 15 = y$ DM1
 -3 A1
 $4 - y/3 = 5$
 $-y/3 = 1$, allow $y = 15 - 12$

[8]

2.

7	3 <small>1 AO1.3b 2 AO3.1c 2 AO3.3</small>	B2 for $\frac{20}{3}$ oe isw Or M1 for $10 \times \frac{2}{3}$	Implied by answer 6
---	--	---	---------------------

3.

- $4m + 12 + 6m - 15$ M1
Allow one error
- $10m - 3$ A1
Allow $10m + -3$

[2]

4.

- $700 \times 1.1^2 - 700$ M1
or 700×0.1 or 70 or 700×1.1 or 770
or 700×1.1^2
or 847 or 140

- 147(.00) A1

[2]

5.

- Correct substitution: $\frac{5(2 \times (-3) + 14)}{4}$ [M1]
 10 [A1]

6.

- Expanding brackets or dividing by 2: $10 - 6x > 7$ or $5 - 3x > 3.5$ [M1] oe
 Rearranging: $-6x > -3$ or $-3x > -1.5$ [M1] oe
 $x < \frac{1}{2}$ [A1]

7.

- (a) $372 - 350$ (22) M1
 $372/350 \times 100 (= 106.28)$
- $22/350 \times 100$ M1
oe 106.28 - 100
- 6.29 A1
Accept 6.3 or 6.286(.....)
- (b) $2576 = 92\%$ M1
0.92 seen B1
- $1\% = 28$ A1
 $2576 \div 0.92$ M1
- 2800 A1

[6]

8.

- $y(x - 3) = 3x + 4$ M1
M1 for cross-multiplying and expanding bracket
- $yx - 3y = 3x + 4$ A1
A1 correct expansion
- $yx - 3x = 3y + 4$ M1
- $x(y - 3) = 3y + 4$ A1
M1 for collecting terms and factorising
- $x = (3y + 4)/(y - 3)$
A1 correct factorisation and division

[4]

9.

25, 30, 17	5	M1 for any two consistent expressions, e.g. $x - 8$, x M1 for $x - 8 + x + x + 5 = 72$ oe A1 for $x = 25$ B1 for Kieran 25 or Jermaine 30 or Chris 17	Accept equivalent correct equations
------------	----------	--	-------------------------------------

10.

(a)		5	P1 begins to work with scaling factors (eg 5) or +6 A1 cao
(b)		10	P1 works with 1:2 ratio eg no. red counters is $30 \div 2 (=15)$ A1 ft