

## 2012 ANU Maths Day Relay Contest Supervisor's Answer Sheet

To maintain consistency across teams please simply respond REJECT to incorrect answers - even ones which are almost correct. Do not allocate a mark until :-

- EITHER you accept an answer (first, second or third attempt), in which case award the full marks as indicated;
- OR the team abandons the question, in which case award zero marks, even if a previously rejected answer was very close.

**NOTE: A maximum of THREE attempts at any question.**

Question	Answer
R1	4
R2	$e$
R3	$3x + 5y - 4 = 0$ or alternatively $y = -\frac{3}{5}x + \frac{4}{5}$
R4	4
R5	$e$
R6	$\{x = 1, y = 2\}$ or alternatively (1, 2)
R7	4
R8	8
R9	$\{x = 1, y = 1\}$ or alternatively (1, 1)
R10	$3x + 5y - 8 = 0$ or alternatively $y = -\frac{3}{5}x + \frac{8}{5}$

Question	Answer
R11	6
R12	4
R13	$\{x = 0, y = 0\}$ and $\{x = 1, y = 8\}$ or alternatively (0, 0) and (1, 8)
R14	4 (kg) and 5 (kg)
R15	75, 125 and 100 (ml)
R16	61
R17	3 (kg) and 4 (kg)
R18	150, 250 and 200 (ml)
R19	43
R20	$\{x = 0, y = 0\}$ and $\{x = 1, y = 5\}$ or alternatively (0, 0) and (1, 5)