Key stage 3 mathematics 2001 Mental arithmetic higher tiers Test A

Test A

Mark scheme

Time: 10 seconds

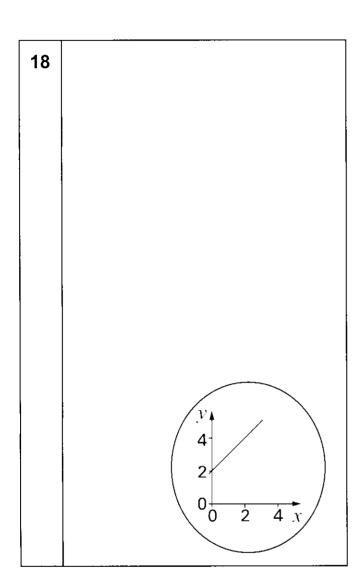
90 mm

7

probabilities, eg 0.666 0.6()7							
1 25 % 2 38 kg 11 $\frac{2}{3}$ Accept $\frac{4}{6}$ or equivale probabilities, eg 0.66 (0.6()? 12 $5m + 7k$ Do not accept partial simplified expressions $5m + 6k + k$ 3 9 or -9 or ± 9 Accept embedded responses, eg $9 \times 9 (= 81)$ 13 f 9.75 4 12ab 14 55 km				8	25 minutes		
2 38 kg 11 $\frac{2}{3}$ Accept $\frac{4}{6}$ or equivale probabilities, eg 0.660 0.6()7 12 $5m + 7k$ Do not accept partial simplified expressions $5m + 6k + k$ 3 9 or -9 or ±9 Accept embedded responses, eg $9 \times 9 (= 81)$ 13 f 9.75 14 12ab Accept equivalent 15 30	Time: 5 seconds		9	123			
2 38 kg 11 $\frac{2}{3}$ Accept $\frac{4}{6}$ or equivalent Accept partial simplified expressions $\frac{5m + 6k + k}{5}$ 12 $5m + 7k$ Do not accept partial simplified expressions $\frac{5m + 6k + k}{5}$ 13 $f = 9.75$ 14 12ab 15 NA Accept equivalent Accept	1	25 %		10	£ 3 55		
11 $\frac{2}{3}$ Accept $\frac{4}{6}$ or equivalent $\frac{4}{3}$ Do not accept partial simplified expressions $\frac{5m + 7k}{9 \times 9 \ (= 81)}$ Accept embedded responses, eg $\frac{9 \times 9 \ (= 81)}{14}$ 12 $\frac{4}{55}$ M $\frac{4}{55}$ Accept equivalent $\frac{4}{3}$ Accept equivalent $\frac{4}{3}$ Accept $\frac{4}{6}$ or equivalent $\frac{4}{3}$ Do not accept partial simplified expressions $\frac{5m + 6k + k}{5m + 6k + k}$					1 3.33		
3 9 or -9 or ± 9 Accept embedded responses, eg 9 × 9 (= 81) 12 $5m + 7k$ simplified expressions $5m + 6k + k$ 13 f 9.75 14 f 9.75	2	38 kg		11	Accept $\frac{4}{6}$ or equivaler probabilities, eg 0.66(. 0.6()7		abilities, eg 0.66(),
13 f 9.75 12ab 14 12ab Accept equivalent 15 30				12	simplified expressions, e		fied expressions, eg
5 0.4 Accept equivalent 15 30	3	9 or -9 or ±9	responses, eg	13	£ 9.75		
	4	12 <i>ab</i>		14	55 km		
αecimais only. 1 = 1	5	0.4		15	30		
			decimals only.		_ -		
6 8.4 Do not accept equivalent values. 16 3 m ≤ answer ≤ 3.2 m	6	8.4		16	3 m ≤ answer ≤ 3.2 m		

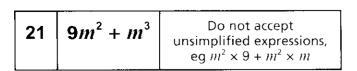
Time: 10 seconds continued

17	-20	Do not accept 20 –



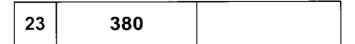
19 3.25 Accept equivalent fractions or decimals.

20 27.5 km Accept equivalent fractions or decimals.

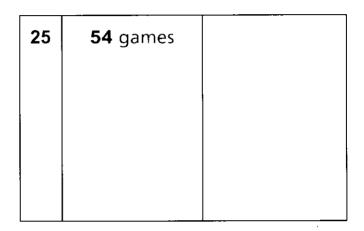


Time: 15 seconds

22 500

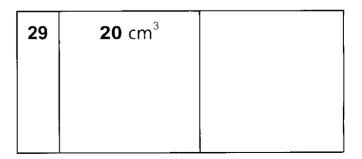






26 square	Ignore any diagrammatic responses.
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28 9 000 0		esponses n words.
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1.3	
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