

Detailed Marking Instructions for each question

Question			Expected Answer(s) Give one mark for each •	Max Mark	Illustrations of evidence for awarding a mark at each •
1.			<p>Ans: $\frac{1}{10}$</p> <ul style="list-style-type: none"> •¹ Strategy: know how to calculate probability •² Process: correctly simplify 	2	<ul style="list-style-type: none"> •¹ $\frac{3}{30}$ •² $\frac{1}{10}$
<p>Notes:</p> <p>1. Accept 1:10, 1 in 10, 10% ...</p> <p>2. Special cases if $\frac{3}{17}$ Award 1 mark if $\frac{3}{7}$ Award 1 mark</p> <p>3. If tree diagram used evidence of • $\frac{17}{30}$ • $\times \frac{3}{17} = \frac{1}{10}$</p>					
2.			<p>Ans: no with reason</p> <ul style="list-style-type: none"> •¹ Strategy: find temperature from scale •² Strategy: determine upper limit of tolerance •³ Communication: state conclusion 	3	<ul style="list-style-type: none"> •¹ 37.7°C •² (36.4°C to) 37.2°C •³ Frances is not in good health as her temperature (37.7°C) is above the upper tolerance (37.2°C) of good health.
			<p>Ans: 5 (m)</p> <ul style="list-style-type: none"> •¹ Strategy: Use Pythagoras to find AB. 	1	<ul style="list-style-type: none"> •¹ $AB = \sqrt{3^2 + 4^2} = 5$
<p>Notes:</p>					

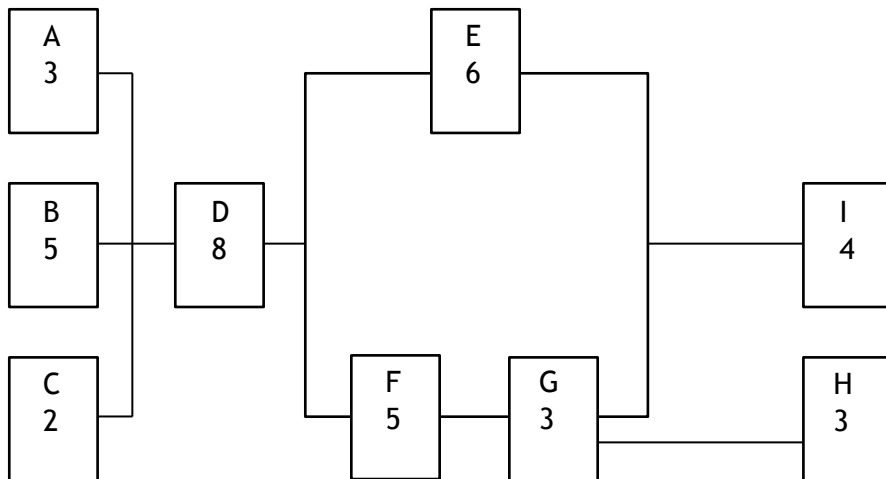
Question		Expected Answer(s) Give one mark for each •	Max Mark	Illustrations of evidence for awarding a mark at each •
	(b)	Ans: 21 m² <ul style="list-style-type: none"> •¹ Strategy: know to find areas of two triangles and add •² Process/Communication: calculate areas and add, stating units 	2	<ul style="list-style-type: none"> •¹ Evidence •² $6 + 15 = 21$
Notes: 1. If 6m ² and 15m ² are clearly shown, but not added, award 1/2				
4.	(a)	Ans: £259 <ul style="list-style-type: none"> •¹ Process: calculate take home pay in £ 	1	<ul style="list-style-type: none"> •¹ $296 - (28 \cdot 43 + 8 \cdot 57) = 259$
Notes:				
	(b)	Ans: yes with reason <ul style="list-style-type: none"> •¹ Strategy/Process: calculate holiday fund •² Process: find total cost of holiday and total holiday fund 13×44 •³ Communication: state conclusion with reason 	3	<ul style="list-style-type: none"> •¹ $259 - (76 + 41 + 45 + 30 + 23) = 44$ •² 520 and 572 •³ Yes he can afford the holiday as he can save £52 more than he needs.
Notes: 1. Working must be shown to justify the answer 2. 1 st mark is for holiday fund which is balance of income v total outgoings - and is available for follow through from (a) - and could be a deficit 3. If holiday fund is <0 (or "deficit" mentioned) mark 2 is unavailable as subsequent working has been eased 4. Mark 3 is available (after deficit) if justified. 5. Alternative: $13 \times 259 - 13 \times 215$				

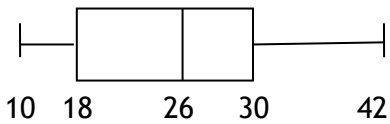
Question		Expected Answer(s) Give one mark for each •	Max Mark	Illustrations of evidence for awarding a mark at each •
5.		<p>Ans: 8200 metres (8.2 km)</p> <ul style="list-style-type: none"> •¹ Strategy: Evidence of suitable conversion of units •² Strategy: Know how to find distance •³ Process: calculate distance correctly •⁴ Communication: round answer correctly, using appropriate units 	4	<ul style="list-style-type: none"> •¹ 20 min x 60 (change to secs) 6.8 m/s x 60 (m per min) •² $D = S \times t = 6.8 \times 20 \times 60$ •³ $D = 8160$ metres •⁴ $D = 8200$ metres or 8.2 kilometres

Notes:

6.	(a)	<p>Ans: task letters and times inserted in chart</p> <ul style="list-style-type: none"> •¹ Strategy: start to allocate tasks •² Strategy: complete allocation of tasks 	2	<ul style="list-style-type: none"> •¹ Any 5 boxes correct •² Remaining 3 boxes correct
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Notes:



Question		Expected Answer(s) Give one mark for each •	Max Mark	Illustrations of evidence for awarding a mark at each •
	(b)	Ans: no with reason <ul style="list-style-type: none"> •¹ Strategy: select critical path •² Communication: state conclusion with reason 	2	<ul style="list-style-type: none"> •¹ 5+8+(5+3)+4 •² no, because it will take 25 hours
Notes: 1. H/I interchanged is acceptable 2. (b) marks can be awarded for incorrect critical path with valid comparison to 22 hours Eg if $\frac{C}{2} \frac{D}{8} \frac{E}{6} \frac{I}{4} = 20$ hours YES as 20 < 22 would gain mark				
7.	(a)	Ans: boys with valid reason	1	
Notes:				
	(b)	Ans: 26, 18, 30 <ul style="list-style-type: none"> •¹ Process: state the median •² Process: state the quartiles 	2	<ul style="list-style-type: none"> •¹ 26 •² 18, 30
Notes:				
	(c)	Ans:  10 18 26 30 42 <ul style="list-style-type: none"> •¹ Strategy: correct end points •² Strategy: correct box 	2	<ul style="list-style-type: none"> •¹ end points at 10 and 42 •² box showing Q₁, Q₂, Q₃
Notes: 1. Incorrect answers in part (b) must be followed through to give the possibility of awarding 2/2				