

Mark Scheme

Q1.

Question	Skills Standard	Process	Mark	Mark Grid	Evidence
	R2	Identifies correct figures to work with	1	A	31, 25.95, 24, 19.95 May be seen in subsequent working
	R3	Begins to find a difference or works with total	1 or	B	e.g. '31' + '24' + '24' (=79) OR '25.95' + '19.95' + '19.95' (=65.85) OR '31' - '25.95' (=5.05) OR '24' - '19.95' (=4.05)
	A4	Full process to find saving	2 or	BC	e.g. '5.05' + '4.05' + '4.05' (=13.15) OR '79' - '65.85' (=13.15) Award BC marks for correct processes with incorrect figures
	I6	Ft Correct answer in correct money notation	3	BCD	£13.15 in correct money notation OR Ft '£13.15' supported by working and in correct money notation
Total marks for question			4		

Q2.

Question	Skills Standard	Process	Mark	Mark Grid	Evidence
(a)	R1	Starts to work with hours or pay for each day	1 or	D	$4 + 5 + 4.5 + 4 + 4.5 (=22)$ OR $4 \times 7.85 (=31.4)$ or $4.5 \times 7.85 (=35.325)$ or $5 \times 7.85 (=39.25)$
	A4	Full process to find total pay	2 or	DE	'22' $\times 7.85 (=172.7)$ OR $2 \times '31.4' + 2 \times '35.325' + '39.25' (=172.7)$ Ft. from incorrect person
	I6	Correct answer with correct money notation	3	DEF	£[172.69,172.71] (correct money notation)
	A5	Valid check	1	G	E.g. alternative method or reverse calculations or estimation
(b)	A4	Works with percentage	1	H	$240 \div 100 \times 25 (=60)$ oe
	R3	Full process to find figures to compare	1 or	J	$1200 \div '60' (=20)$ OR $26 \times '60' (=1560)$
	I6	Correct conclusion and accurate figure(s)	2	JK	No and 20 (weeks) OR No and (£)1560 (pay back sooner)
Total marks for question			7		

Q3.

Question	Skills Standard	Process	Mark	Mark Grid	Evidence
(a)	R2	Begins the process	1 or	N	$34 \times 2.75 (=93.5)$ OR $120 - 7.5 - 7.5 (=105)$ OR $7.5 + 7.5(=15)$
	A4	Full process to find figures to compare	2 or	NP	' $93.5' + 7.5 + 7.5(=108.5)$ OR $34 \times 2.75 (=93.5)$ and $120 - 7.5 - 7.5 (=105)$ OR ' $105' \div 34(=3.08..)$ OR ' $105' \div 2.75(=38.18..)$
	I6	Correct conclusion with accurate figures	3	NPQ	Yes AND (£)108.5(0) OR Yes AND (£)93.5(0) and (£)105 OR Yes AND (£)3(.08.. per metre they can afford) OR Yes AND 38(.18... m)
(b)	I6	Identifies correct likelihood	1	R	Selects likely
Total marks for question			4		

Q4.

Question	Skills Standard	Process	Mark	Mark Grid	Evidence
(a)	R1	Starts to work with costs	1	A	Uses 12.6 and 6 in a calculation May be seen in subsequent working
	A4	Develops solutions	1 or	B	$12.6 \times 2 (=25.2)$ or $6 \times 2 (=12)$ or $12.6 + 6 (=18.6)$ or $32 - 12.6(=19.4)$ or $32 - 6(=26)$
	R3	Process to find total costs or cost per person	2 or	BC	' $25.2' + '12'(=37.2)$ OR ' $18.6' \times 2(=37.2)$ OR $32 - 12.6 - 12.6 - 6 - 6(=-5.2)$ OR $32 - 12.6 - 12.6 - 6(=0.8)$ OR $32 - 12.6 - 6 - 6(=7.4)$
	I6	Correct decision, accurate figures	3	BCD	Yes AND (£)37.2(0) OR Yes AND cheaper by (£)5.2(0) OR Yes AND (£)0.8(0) or 80p for 1 child OR Yes AND (£)7.4(0) for 1 adult

Question	Skills Standard	Process	Mark	Mark Grid	Evidence
(b)	R3	Starts to substitute in formula	1 or	E	$3 \times 8(=24)$ or $5 \times 4(=20)$
	A4	Completes substitution	2 or	EF	' $24' \div 5(=4.8)$ OR ' $20' \div 8(=2.5)$
	I6	Correct decision with accurate figures	3	EFG	Yes / No and 4.8(km) OR Yes / No and 2.5(miles)
	A5	Valid check	1	H	Reverse process, alternative method or estimation
Total marks for question			8		

Q5.

Question	Skills Standard	Process	Mark	Mark Grid	Evidence
(a)	R1	Full process to find cost at gym shop Process to half water bottle cost	1	K	$2 \times 9.95 + 3.5 (=23.4)$
	R2		1 or	L	$\frac{1}{2} \times 3.5 (=1.75)$ oe
	A4	Full process to find cost at local shop	2	LM	$\frac{1}{2} \times 3.5 + 21 (=22.75)$
	I6	Correct decision with accurate figures	1	N	Local shop AND (£)23.4(0) AND (£)22.75

Question	Skills Standard	Process	Mark	Mark Grid	Evidence
(b)	R1	Starts to work with time.	1 or	P	45 + 20 + 15 + 30 + 20 oe (=130 mins or 2 hrs 10 mins) OR subtracts at least 2 times from 8 pm OR adds at least 2 times to 5:30 pm OR 8 (pm) – 5:30 (pm) oe (=2 hrs 30 mins or 150 mins)
	A4			PQ	45 + 20 + 15 + 30 + 20 (=130 mins or 2 hrs 10 mins) AND 8 (pm) – 5:30 (pm) (150 mins or 2 hrs 30 mins) OR 5.30 + 45 + 20 + 15 + 30 + 20 (=7:40 pm) OR 8:00 – (45 + 20 + 15 + 30 + 20) (=5:50 pm)
	I6	Valid decision with accurate figures	3	PQR	Yes AND 130 (mins) AND 150 (mins) oe OR Yes AND (she will be at her friend's by 7:40 (pm) oe OR Yes AND (could arrive at the fitness centre at) 5:50 (pm) oe OR Yes AND 2 hrs 10 mins AND 2 hrs 30mins OR Yes AND 20 (mins) (left)
Total marks for question			7		

Q6.

Question	Skills Standard	Process	Mark	Mark Grid	Evidence
	R1	Process to calculates total cost for one bathroom range Process to find prices to compare	1 or	A	323.45 + 184 + 267.95 (=775.40) OR 202 + 253.63 + 242.57 (=698.20) OR 243.78 + 247.52 + 227 (= 718.30)
	A4			AB	323.45 + 184 + 267.95 (=775.40) and 202 + 253.63 + 242.57 (=698.20) and 243.78 + 247.52 + 227 (=718.30) Allow errors in unit pence figure
	I6	Correct answer with accurate figures and to 2 d.p.	1	C	(£)698.20 – 2 d.p. required
	A5	Valid check	1	D	Check by reverse calculation, alternative method or estimation.
Total marks for question			4		

Q7.

Question	Skills Standard	Process	Mark	Mark Grid	Evidence
(a)	A4	Process to find total cost or remaining money	1 or	J	$3.99 + 4.49 (= 8.48)$ OR $7.50 - 4.49 (= 3.01)$ OR $7.50 - 3.99 (= 3.51)$
	A4	Full process to find difference between full price and special offer	2 or	JK	'8.48' - 7.50 (= 0.98) OR $3.99 - '3.01' (= 0.98)$ OR $4.49 - '3.51' (= 0.98)$
	I6	Accurate answer with correct money notation	3	JKL	£0.98 OR 98p correct money notation
	A5	Valid check	1	M	Valid check e.g reverse calculation or alternative method or appropriate estimation
(b)	R3	Uses 60 minutes in an hour	1	N	e.g. Converts 135 mins to hours (2 hrs 15 mins) oe OR works in minutes throughout (time for film and journey to bus stop is 145 mins) OR Uses 60 in a build-up method for time or time line
	A4	Begins to process times: adds one time to 3.30 or film time to journey time or subtracts one time from bus time	1 or	P	e.g. $3.30 + '2 \text{ hrs } 15'$ (= 5.45) OR '2 hrs 15 mins' + 10 mins (= 2 hrs 25 mins) oe OR $3.30 + 10 (= 3.40)$ OR $5.50 - 10 \text{ mins} (= 5.40)$ OR $5.50 - '2 \text{ hrs } 15'$ (= 3.35) OR $5.50 - 3.30 (= 2 \text{ hrs } 20)$ oe
	R3	Full process to find total time or time of arrival at bus stop or figures to compare	2 or	PQ	e.g. $3.30 + '2 \text{ hrs } 15' + 10 \text{ mins} (= 5.55)$ OR '2 hrs 20 mins' oe and '2 hrs 25 mins' oe OR $5.50 - '2 \text{ hrs } 15 \text{ mins}' - 10 \text{ mins} (= 3.25)$
I6	Valid decision with accurate figures	3	PQR	e.g. No AND 5.55 (pm) OR No AND 2 hrs 20 mins oe and 2 hrs 25 mins oe OR No AND 3.25 (pm) NB if PQR awarded, award mark N	
Total marks for question			8		

Q8.

Question	Skills Standard	Process	Mark	Mark Grid	Evidence
(a)	R1	Begins to find total price for seed or feeders	1	A	$2 \times 6.95 (= 13.9(0))$ OR $3 \times 3.10 (= 9.3(0))$
	A4	Process to find total	1 or	B	'13.9(0)' + '9.3(0)' (=23.2(0))
	I6	Correct total with correct money notation	2	BC	£23.20 (correct money notation)
(b)	R2	Begins to process membership costs to costs per year for one person or total cost per month	1 or	D	e.g. $4 \times 12 (=48)$ or $3 \times 12 (=36)$ OR $4 + 4 + 3 (=11)$ OR $126 \div 12 (=10.5)$
	A4	Process to find figures to compare	2 or	DE	'48' + '48' + '36' (=132) OR '11' \times 12 (=132) OR $4 + 4 + 3 (=11)$ and $126 \div 12 (=10.5)$
	I6	Correct decision with accurate figures	3	DEF	Family and (£)132 OR Family and (£)11 and (£)10.5(0) per month
	A5	Shows a valid check	1	G	Check by reverse calculation or alternative method
Total marks for question			7		

Q9.

Question	Skills Standard	Process	Mark	Mark Grid	Evidence
(a)	R2	Begins process to find difference in lens strength	1 or	A	$2.75 - 2.25 (=0.5)$ OR $1.5 - 1.25 (=0.25)$ OR $2.25 - 2.75 (= -0.5)$ OR $1.25 - 1.5 (= -0.25)$
	A4	Full process to find figures to compare	2 or	AB	e.g. $2.75 - 2.25 (=0.5)$ and $1.5 - 1.25 (=0.25)$ OR $2.25 - 2.75 (= -0.5)$ and $1.25 - 1.5 (= -0.25)$
	I6	Valid decision with accurate figures	3	ABC	e.g. Right AND 0.5 and 0.25 Right AND -0.5 and -0.25
(b)	R3	Begins to add costs	1 or	D	e.g. $155 + 39.5 (=194.50)$ OR $155 + 39.5 + 25 (=219.50)$
	R2	Identifies correct insurance cost for total of frames and lenses	2	DE	(£)19 identified and $155 + 39.5 (=194.50)$ Ft correct insurance price identified for '194.5' May be indicated on table or shown in subsequent calculations
	A4	Full process to find the correct answer for their insurance choice	1 or	F	$155 + 39.5(0) + 25 + \text{insurance} (=238.5)$ NB previous working may be reused and insurance must be from the table
	I6	Accurate figure and correct money notation	2	FG	£238.50
Total marks for question			7		