<table>
<tr><td colspan="7">Elimination</td></tr>
<tr><td>6</td><td colspan="2">$5a+3p=1.96$ and $3a+2p=1.22$ oe
or
$5a+3p=196$ and $3a+2p=122$ oe</td><td rowspan="3">M2 for an arithmetical method (must see the calculation to find 0.22 or 0.26 or 0.74 and 0.48 oe)
E.g.
6.1(0) – 5.88 (= 0.22) oe
or
3.92 – 3.66 (= 0.26) oe
or
1.96 – 1.22 (= 0.74) oe
and 1.22 – “0.74” (= 0.48)</td><td></td><td>5</td><td>M1 for setting up both equations oe
Allow the use of apples and pears oe throughout, e.g.
5 apples + 3 pears = 1.96 and
3 apples + 2 pears = 1.22</td></tr>
<tr><td></td><td>E.g.
$15a+9p=5.88$
$15a+10p=6.1\ 0$
Subtracting
$(-p=-0.22)$</td><td>E.g.
$10a+6p=3.92$
$9a+6p=3.66$
Subtracting
$(a=0.26)$</td><td></td><td></td><td rowspan="2">M1 for a correct method to eliminate a or p: coefficients of a or p the same and correct operation to eliminate selected variable (condone any one arithmetic error) or
to find the cost of 1 apple and 1 pear</td></tr>
<tr><td></td><td colspan="2">E.g. $5a+3p=1.96$ and $6a+4p=2.44$ oe
Subtracting</td><td></td><td></td></tr>
<tr><td></td><td>E.g.
$5a+3(\text{"0.22"})=1.96$
or
$3a+2(\text{"0.22"})=1.22$</td><td>E.g.
$5(\text{"0.26"})+3p=196$
or
$3(\text{"0.26"})+2p=1.22$</td><td rowspan="2">E.g.
3 × 0.22 (= 0.66)
1.96 – “0.66” (= 1.3(0))
“1.3(0)” ÷ 5 (= 0.26)
or
5 × 0.26 (= 1.3(0))
1.96 – “1.3(0)” (= 0.66)
“0.66” ÷ 3 (= 0.22)
or
Apple and pear is 0.48 oe</td><td></td><td></td><td rowspan="2">M1 (dep on M2) for substituting their value found (must be > 0) of one variable into one of the equations or
for repeating above method to find second variable or
for third working column allow $k(a+p)=k(0.48)$ or
for a complete arithmetical method to find the other value</td></tr>
<tr><td></td><td colspan="2">E.g
$a+p=0.48$ oe</td><td></td><td></td></tr>
<tr><td></td><td colspan="3">$10\times\text{"0.26"}+10\times\text{"0.22"}$ or $(a+p=)\,0.48\times10$ oe or $k(a+p)=k(0.48)\times\frac{10}{k}$</td><td></td><td></td><td>M1 (dep on M3) can be implied by $10(a+p)$ provided a and p must be > 0</td></tr>
<tr><td></td><td colspan="3">Working required</td><td>4.8(0)</td><td></td><td>A1 dep M2</td></tr>
<tr><td></td><td colspan="3"></td><td></td><td></td><td>Total 5 marks</td></tr>
</table>

Substitution				
6	$5a+3p=1.96$ and $3a+2p=1.22$ oe **or** $5a+3p=196$ and $3a+2p=122$ oe		5	M1 for setting up both equations oe Allow the use of apples and pears oe throughout, e.g. 5 apples + 3 pears = 1.96 and 3 apples + 2 pears = 1.22
	E.g. $3\left(\frac{1.96-3p}{5}\right)+2p=1.22$ or $5\left(\frac{1.22-2p}{3}\right)+3p=1.96$ or $3a+2\left(\frac{1.96-5a}{3}\right)=1.22$ or $5a+3\left(\frac{1.22-3a}{2}\right)=1.96$ or $p = 0.22$ or $a = 0.26$			M1 for correctly writing a or p in terms of the other variable **and** correctly substituting (condone any one arithmetic error)
	E.g. $(a=)\frac{1.96-3(0.22)}{5}$ or $(a=)\frac{1.22-2(0.22)}{3}$ or $(p=)\frac{1.96-5(0.26)}{3}$ or $(p=)\frac{1.22-3(0.26)}{2}$			M1 (dep on M2) for substituting their value found (must be > 0) of one variable into one of the equations **or** for repeating above method to find second variable
	$10\times"0.26"+10\times"0.22"$			M1 (dep on M3) can be implied by $10(a + p)$ provided a and p must be > 0
	Working required	4.8(0)		A1 dep M2
				Total 5 marks