Examiner's Report

Q1.

Most students found this question straightforward and scored full marks.
Occasionally students did not plot the extra point in response to part (a) but it was plotted accurately by the vast majority of students.
The relationship was clearly described in part (b) though a small minority of students stated that "as the weather gets hotter more hot drinks are sold". Lines of best fit were generally well drawn. Only a small number of students attempted to draw a curve of best fit where a straight line was required.
The estimates given in part (d) were well judged and most students who drew poor lines of best fit were able to show their method and scored the mark available here.

Q2.

Many students could successfully describe the relationship between the hand length and the foot length, either by commenting on the greater the length of the foot, the greater the hand length or vice versa. Many scored the mark for stating 'positive correlation', sometimes together with a correct statement. However, there were many students who just wrote that the relationship was positive rather than writing 'positive correlation' thereby scoring no marks in (a). Part (b) was very well answered. Most students correctly estimated Toby's foot length between 24 and 25 inclusive, often without drawing a line of best fit.

Q3.

This question was also well answered. The majority of candidates were able to produce an ordered stem and leaf diagram, occasionally there was an error or omission but the understanding was clear. Providing a key was less consistent. Candidates should be encouraged to always provide a key as this is an independent mark which can be awarded even if the diagram has multiple mistakes.

Q4.

This was generally well done with the majority of students getting full marks. The main error was the absence of a key (or an inappropriate key), whilst some failed to provide a stem and leaf diagram that was ordered.

Q5.

Students almost always scored both the marks available in part (a) of this question, though there were some students who merely gave the sum of the three probabilities (0.8) as their answer.

Part (b) was not completed quite as well as part (a). Common incorrect working seen included 0.20×50 and 0.25×50. It would appear that some students had used their answer to part (a) not realizing that yellow was the colour focussed on here.

Q6.

This question is becoming more familiar to candidates and many were able to draw a two way table. They usually highlighted the required answer and so gained full marks. In this question it was fairly easy to get to the correct answer quickly without the need of a full table, a good proportion of candidates took the quicker option and again gained full marks.

Q7.

98% of candidates were able to identify at least one of the aspects that were wrong in part (a), although the literacy of the answers was quite poor. Some lost marks due to the difficulty in expressing themselves clearly, and generalised statements such as 'biased' and 'leading question' were too vague to be awarded a mark. Those that spotted 'there was no other box' or 'what if someone doesn't use the internet' were allowed the mark for realising that the responses were not exhaustive. There were a pleasing number of candidates that managed to mention all three of the aspects.

In part (b), many candidates managed to correct the original question by providing a time frame to gain the mark for the 1st aspect. As commercial questionnaires do not contain inequalities, those that chose to use inequalities in the response boxes lost the mark for the 2nd aspect. Tally charts also did not gain a mark for the 2nd aspect, although few of these were seen. There were still a number of overlapping response boxes but as long as these were exhaustive they gained a mark.

Q8.

Part (a) was answered well, with many candidates pointing out the overlapping intervals under the response boxes. One or two pointed out that asking a person's age could be argued to be intrusive. This was given a mark. The other mark was harder to earn and many candidates did not see the issue of question 2 being a leading question.

Part (b) asked candidates to produce a question about fruit consumption of their own to ask . Many did a good job on this with a time frame in the question and no overlapping intervals with the response boxes. Some candidates asked how often fruit was consumed and this was felt not to be worth a mark.

Part (c) was a standard stratified sample question and many candidates did the correct calculation and rounded of their answer to get 7.

Q9.

Only a small proportion of candidates constructed and used a two-way table to solve the problem posed by this question. These candidates were nearly always successful. Again, some candidates could solve the problem quickly and easily. However, most candidates' solutions seemed to consist of calculations scattered around the working space. A generous mark scheme allowed examiners to award credit to candidates who made limited progress towards a correct solution. A small proportion of candidates simply added up 28, 36, 20 and 15 and subtracted their answer from 120. Over a half of all candidates scored full marks whilst most other candidates scored at least one mark for their responses.

Q10.

There was a lot of information to be processed in this question. Those candidates who used a suitable two- way table were much more successful than those who tried to reason it out. The most common successful approach was to set up a two way table with rows labelled 'Swim' and 'Not Swim' and with columns labelled 'Year 4' Year 5' and 'Year 6'. Candidates could then work through the given information and put it in the correct cells in the table to produce a table like one in the diagram.

	Y4	Y5	Y6	Tot
S		21	18	
NS	11			37
Tot			30	96

The table was a huge aid in organising the data, so that the remaining cells could be filled in easily and the correct values picked out. Even so, some candidates managed to put at least one given value (usually the 18) in the wrong cell. A few candidates who did adopt this approach then put the wrong number down on the answer line so losing a mark.

Q11.

Candidates attempted this question in a variety of ways, although most found the cost per gram or the number of grams per 1p (or £1). A significant number of candidates misinterpreted their own calculations, giving 'medium' or 'large' as the best value when the evidence clearly indicated 'small'. Those who calculated the number of grams per 1p, for example, often concluded incorrectly that the medium bottle was best because they thought that the smallest number represented the best value. The other common error was for candidates to use 88, 1.95 and 3.99 as the monetary units in their calculations (i.e. one in pence and two in pounds) which meant that they only had comparative figures for two bottles. Numerous other approaches were seen. Often candidates spotted they could use 1710 g as a comparable amount for the small and medium bottles, but then did not know how to make a comparison with the large bottle containing 1500 g. However, many were successful in their alternative approaches – fully correct solutions were seen for comparing 1500 g, 570 g, 342 g, 1710 g, 3000 g and 200 g.

Q12.

Candidates' solutions to this question were generally very good indeed. A variety of approaches were employed usually leading to three results which could be compared. The wrong size of tube was often selected however dependent upon the method chosen. Many candidates had not established whether they were finding ml/p or p/ml and so often made the wrong conclusion. For example, with answers of 39.10..ml/£ (70ml), 36.36..ml/£ (100ml) and 37.59..ml/£ (150ml), the 100ml tube was selected with 36.36...being the lowest value.

Q13.

This question was well attempted by most students. It was rare to see incorrect responses but the most common incorrect response was an answer of 20 tickets from 240 ÷ 1.2 = 200, 200 ÷ 10 = 20. Nearly all students realised that 28.8 meant that you could only buy 28 tickets and an answer of 29 was very rare.

Q14.

A good proportion of students found this "best buy" question straightforward and scored full marks. The approach taken was usually either to calculate the number of matches bought for each penny or the cost per match. Some students then misinterpreted their answers and, for example, having worked out the number of matches for each penny, stated that the small box was best value. A significant number of students did not use common units and used 23, 72 and 4.16 as the three costs rather than 23, 72 and 416 or 0.23, 0.72 and 4.16

Q15.

This was an accessible question for most candidates. It allowed candidates a positive start to the paper. A variety of approaches were used with many pupils choosing to build up the ingredients by doubling, halving and then adding their results together.

Those candidates who failed to score full marks either made an arithmetical error and scored B2, or lost track of their multiples and calculated quantities for an alternative number of scones.

Q16.

This appeared to be a very good first question as nearly all candidates achieved the correct answer and it was pleasing to see that most displayed a good method. The majority divided 7.80 by 6 to find the cost of one cup and multiplied the result by 10. There was also some successful use of partitioning, e.g. dividing by 3 to get the price of 2 cups and then adding twice this value to £7.80. Some candidates failed to calculate 7.80 ÷ 6 correctly, choosing to do this without a calculator, and some worked out 1.30 × 10 as 10.30. Incorrect answers were often the result of candidates working out the cost of a wrong number of cups.

Q17.

Parts (a) and (b) were well answered by most students.
In part (a) the most common method was to say 10 biscuits needed 60g so 20 biscuits needed 120g of sugar. Many different methods were used in part (b) with many incomplete methods such as giving an answer of 2.5 from 1000÷400 . Recognising there were 1000g in a kg did not prove to be a problem for the students.

Q18.

Less than half the candidates were able to score full marks on this question. A common error here was to round 0.51 to 1 rather than 0.5. Some candidates rounded 89.3 to 89. This was condoned on this paper but candidates should be advised to find estimates for calculations by rounding each number in the calculation to 1 significant figure. A surprising number of candidates attempted to do this question by long hand calculations.

Q19.

A significant majority of students scored 1 mark, usually for showing that angle *CBD* =55, this was often correctly placed on the diagram. They then progressed to finding angle *CDB* = 95 but from here were not always able to make the final step to obtain the answer of $x = 95$. Often reasons were not even attempted by candidates, where they were they were often lacking in the required vocabulary, just stating "parallel lines" is not sufficient or some students believed that angles *EDB* and *CBD* were alternate angles because of the "Z" shape that was created; the same with angles *CDB* and *ABD*. Very few candidates knew the angle facts for corresponding or co-interior angles. On the whole the structure of the working was poor and candidates should be encouraged to annotate the diagram with all the angles they find and give the reasons they use; inevitably there were those who just listed all the reasons they knew in the hope that something would score a mark. This is not an acceptable approach, only valid reasons should be given.

Q20.

Most students approached this question by adding 9 minutes many times to 6.45 and then adding 12 minutes to 6.45. There were some arithmetic errors found when using this approach. Those that were able to do this accurately tended to get the correct answer of 7.21 am. Some students approached this by trying to find the LCM of 9 and 12 but many of these who found the LCM was 36 then failed to add this on to 6.45 am.

Q21.

Part (a) was done quite well. Many students were able to write 180 as a product of prime factors- the use of factor trees being by far the most popular approach. Here, as elsewhere, basic arithmetic was an issue for some students, eg 180 written as 2 × 60 or as 8 × 20. A common incorrect answer was to write the prime factors as a list of prime factors rather than as a product of prime factors.

Part (b) was not done so well, though many students were able to get 1 mark for writing two numbers with one of the two required properties, ie as having an HCF of 6 or as having a LCM a multiple of 15. Popular incorrect answers, scoring 1 mark, were 30, 60 and 3, 5.

Q22.

Some candidates attempted this question with a diagram, either a sketch or scaled. In very few cases did this approach help them, since there was clearly little understanding of bearings as drawn clockwise from a north line. It was also common to see reflex angles drawn as obtuse, and vice versa. The most common incorrect answer was 310°, from 360° – 50°. Other common errors involved confusion of the relative location of the ship and the lighthouse.

Overall, this was a poorly answered question showing bearings as a general weakness.

Q23.

There were very few correct answers in part (a). Many students gave answers of 330° or 30° without working. Working accompanying 30° came from 360°- 330°. Very few students drew a diagram; those who did often left out one of the north lines.

In part (b) many students tried to break down the distance and speed obtaining 1 hour for 120 miles and trying to find the time needed for the remaining 80 miles. Unfortunately this method was often unsuccessful due to arithmetic errors. One mark was awarded for 200 ÷ 120 but this often resulted in an incorrect decimal (eg 1.8) which was converted incorrectly. However some marks were available when time conversions were done correctly. Some students tried to use the speed, distance and time formula but used 10 as the time. This often resulted in (10 × 120) ÷ 200. Another common error was to calculate 200 × 120. A small number of students spoiled an otherwise correct response by failing to give an actual time of arrival, giving instead the duration.

Q24.

Students who brought a pair of compasses and used it within this question were usually at least partially successful. A surprising number drew intersecting arcs but did not join them with a straight line, possibly because they had half remembered the method or more prosaically did not have a ruler. Some students used arcs which were centred on each end of the line and they found that the intersections took place an uncomfortable long way up the page. Many used just one set of arcs, possibly thinking of the equilateral triangle construction and many drew arcs which just touched at the midpoint of the given line.

Q25.

For this QWC question a full method and justification was required. Apart from some who used the area formula, most candidates knew what to do and marks were often lost due to a lack of communication rather than a lack of understanding. The main issues were not showing full working for finding the circumference of the circle and not fully justifying why 4 rolls of plastic strip were required. It was quite common for candidates to jump from a circumference of 7.5 to an answer of 4 rolls.

Q26.

A good number of candidates were able to collect two marks here. Where candidates obtained one mark this was often due to giving translation as the transformation, but then describing the movement rather than giving the vector, giving an incorrect vector or writing the vector incorrectly as a coordinate. Common errors with the vector were incorrect signs on the two elements and transposition of the two numbers. It was pleasing to see that a relatively small number of candidates described a completely incorrect transformation, however there were a significant number who gave more than one transformation, despite the instruction in the question, and therefore lost marks.

Q27.

It was a surprise to see this plan question cause so many problems. More than 80% of students scored zero, and most of these attempted a 3D drawing rather than a 2D plan.

Q28.

Many candidates drew a net rather than a plan in part (a) and gained no marks. The fact that nets were so common suggests that candidates were not as familiar with the topic of plans and elevation as they should have been. When a rectangular plan was drawn, it was not uncommon for at least one dimension to be wrong.

Candidates were more successful in part (b) with many able to draw a correct sketch of the prism. Some candidates attempted to display more faces than could be seen from any one angle, thus distorting the sketch. Triangular prisms and pentagonal prisms were quite common among the responses awarded no marks.

Q29.

Nearly all candidates attempted this question well. A small proportion of candidates gave 16 (presumably

from 20 – 4) as their answer to part (a).

Q30.

There were relatively few cases of candidates using incorrect probability notation. Part (a) & (b) were well answered; the only problem in part (c) was from miscalculation. Some lost the mark in (c) through failing to state the probability correctly (sometimes using ratio notation).

Q31.

Candidates who realised that the sum of the probabilities was 1, usually gained at least one mark, poor arithmetic often accounting for the loss of the final mark

Some candidates worked in percentages and nearly always failed to give the units of their answer of 6.

A great many candidates treated the information given as a linear sequence and attempted to interpolate an answer of 0.12 or 0.13 or 0.14 between 0.09 and 0.18

Some thought they were trying to find the mean and divided by 6.

Q32.

The bill in part (a) was generally well completed - although occasionally the '12' as the number of light bulbs was omitted. A few candidates worked out the total price of the light switches by dividing by 5 instead of multiplying.

Similarly, many candidates got the correct answer to part (b), although there was the odd error of adding £64.83 instead of subtracting it. Some candidates thought they had to find 2.56% interest and then add it on.

Q33.

Most of the candidates wrote the correct answer to part (a). The most common incorrect responses were $\frac{1}{100}$ or $\frac{0.1}{100}$.

In part (b), most of the candidates correctly wrote ¼ as 0.25. Common incorrect responses were 0.4 and 1.4, with quite a few 2.5 and even 0.75.

Q34.

Well answered; just some errors in factors of 10 by a minority, mainly in part (c).

Q35.

This question was answered surprisingly poorly. Many candidates gave an incorrect answer with no working and got no marks. Those who first wrote down separate expressions for the number of pets Agatha and Isabel each had could often be awarded one mark for a correct expression. Common errors

included writing x^2 rather than $2x$ for the number of pets Agatha had and either $3x$ or x^3 instead of $x + 3$ for the number of pets Isabel had. Some candidates wrote the correct expressions but did not add them or forgot to add x for Katie. Many candidates did not appear to appreciate that Isabel had three more pets than Katie or that the question asked for the **total number** of pets. A very common incorrect answer was $2x + 3$. Some candidates wrote ×2 + 3 or tried to substitute numbers to give the total number of pets.

Q36.

This question was poorly answered with very few students indeed using algebra. Often ½ was given as the answer in part (a) followed by 100 in (b) but marks could not be awarded for this as in both parts of the question it was clearly stated that an expression in x was required.

Q37.

Most candidates were able to draw a suitable diagram to show the information. Most candidates drew bar charts although a few frequency polygons were seen. The most common error was to not label the 'minutes' axis. Others labelled the axis 'frequency' not indicating that the numbers were in minutes. Nearly all candidates scored a mark for a key or suitable labels and a mark for at least 3 correct plots. Most candidates scored at least 1 mark in (b).

Candidates often lost a mark as their two reasons were the same in essence. For example, 'Harry watched 15 minutes more TV than Seamus' for reason 1 and 'Seamus watched 15 minutes less TV than Harry' for reason 2 would not score 2 marks. The question asked for a comparison from Monday to Thursday. However many candidates only commented on 1 or 2 specific days so could not score both marks.

Q38.

Nearly all candidates were successful in drawing the correct conversion graph and many went on to show that Kate was taller either for converting 62 inches to 155 cm or for converting 150 cm to 60 inches. Many who used the graph to do their conversion drew a vertical line at 6.4 rather than 6.2 or read of 15.5 on the vertical axis as 16 or 15.1.

Q39.

A fairly small number of candidates achieved full marks on this question. Candidates often arrived at a correct final answer between 6.86 and 6.88 from an incorrect method. The majority of candidates who arrived at the final answer gave it to three decimal places as opposed to three significant figures, but were not penalised for this.

It was disappointing to note that a number of candidates failed to score. Candidates commonly used the wrong formula for calculating the area of a circle, finding the circumference instead. A small number of candidates were able to find the area of the circle correctly but then failed to halve this, scoring no further marks. This question highlighted many candidates' poor knowledge of formulae associated with circles.

Q40.

Surprisingly few candidates reached the correct final answer with units on a relatively straightforward circumference question, albeit in the context of ribbon round a cake. Several candidates used the area

formula or missed the required units. The mark for giving centimetres associated with a final answer was gained by others who had made no progress with circumference.

Q41.

There is always some confusion between the various statistical measures. Candidates find it difficult to remember which one is which. This appeared to be less of a problem than in previous series, with many candidates picking up full marks. In calculating the mean candidates should always be advised to write down the full answer from their calculator. Some rounding (to 2.26) was allowed, but further than this was penalised.

In part (b) the question asked for a comparison, with the mean and range given. Most candidates wrote something about the mean and range, but it was rarely a comparison.

Frequently they copied down the figures, or worked out the difference. What was really needed was a written summative statement using descriptive terms, which is why lines were printed for the answer.

Q42.

This was largely a test of memory. About two thirds of the students gained the marks in these short questions.

Q43.

This was not well done. Many students gravitated towards producing a "star" shape with the four apexes at the centre: unfortunately most then found it very hard to use additional shapes around the outside of the star in such a way as to avoid gaps. Those who alternately flipped the shape in lines found it much easier. Some just did not understand the instruction "tessellate".

Q44.

This question was well attempted by the majority of candidates however only third of candidates gained full marks for £14.50. Despite a fully correct method shown some candidates wrote 14.5 on the answer line hence only achieved 2 marks. Some candidates failed to realise that buying in a pack of three was cheaper than buying three calculators separately hence did more calculations than necessary, which although should not have affected them arriving at the correct answer, did due to poor arithmetic. Others, that also did not realise that the pack was cheaper, did not look at all the ways of buying eight calculators so arrived at the answers in the special case, with £10 being the most common incorrect response. Another common incorrect response was subtracting from £20 instead of £40.

Q45.

As with Q2 (d) some candidates showed little understanding of an appropriate amount for the cost of a holiday, including one of £714×95×95(=£6443850) per child. The instruction to 'compare' seems to have confused most since they only found the difference between the prices and made no other comment. Candidates who gained four marks for the prices often did not complete their answer for the fifth mark.
The majority of candidates attempted this question. Only one or two managed to gain full marks and the

majority gained one mark for recognising 714 and 802. The vast majority of candidates could not work out the percentages, and attempted to use the chunking and combining method which led them to make errors, which meant they could not gain the method mark, though most did attempt to produce a costing for two adults and two children.

Again for a calculator paper the candidates did not appear to use one for this question. A lot of the candidates did multiply their adult and children's prices by two and add but again they did not make the comparison required for the final C1 mark.

Q46.

Parts (a) and (b) were often correct but part(c) caused the weaker candidates a problem as the use of trial and improvement methods did not easily give the answer of 2.6. Candidates that used an algebraic solution were more successful as one mark was awarded for showing the intention of subtracting 4 from each side of the equation and the incorrect simplification of the correct answer of $13\frac{1}{5}$ was condoned. There were some candidates that gave 13 as their final answer but did not gain any marks due to a lack of working out shown.

Q47.

Interestingly the modal mark for this question was one. This was usually awarded for writing 9.2 for $\sqrt{84.64}$.

Many candidates did correctly calculate the correct answer but the majority of candidates at this level still cannot use their calculators effectively.

Q48.

Surprisingly, parts (a) and (b) of this question were poorly answered. In (a), the cross was often placed between ½ and 1. A lack of accuracy in positioning the cross in part (b) accounted for many unsuccessful attempts. Part (c) usually gained full credit.

Q49.

This question was well attempted with few blank responses but very few correct responses in either part.

In part (a) only 9% of candidates gained 1 mark. Common incorrect responses included b>a or giving Abigail and Bob ages then calculating a numerical difference.

In part (b) only 4% of candidates wrote down the correct expression. Several candidates demonstrated that they understood how to calculate the mean but not how to correctly write this in algebra, writing a+b÷2. Other common incorrect responses included repeating the answer offered in part (a), ab, a+b and other expressions involving a's and b's.

Q50.

Weaknesses in algebra persist, as demonstrated by this question. In part (a) 4+*d* was seen, as were numerical answers. Those unable to answer part (a) failed also in part (b). There were many answers which involved letters and numbers but not many which included them in the right order or combination.

Q51.

Answers to parts (a) and (c) were good. Many candidates knew how to expand brackets correctly for part (a). On part (c), many candidates knew they had to add the exponents.

Part (b) was answered much less surely, with correct answers rather rare. Some candidates who spotted that *y* was a common factor then went on to write $y(y + 3y)$.

Q52.

A standard manipulative algebraic question where 73% of candidates gained 2 marks and 14% gained 1 mark for writing $4x$ or $9y$.

Q53.

Almost all students attempted parts (a) and (b) well and it was rare to see a blank response. In part (a) common errors included 2x6, 2x8 and x8 and in part (b), where students were generally more successful, the only repeated common error was attempting to divide the powers too.

Q54.

Students attempted this question well and often gained full marks, though not needed, it was rare to see -6 as the other possible answer. Common errors included not using the inverse operations or, if they did, not performing them in the correct order.

Q55.

This question was very well understood and well answered with almost all candidates scoring full marks.

Q56.

Under a half of all students showed any understanding of significant figures and under one third of students scored both marks for their answers to this question.

Answers to part (a) were more often successful than answers to part (b). A very common error in part (b) was to give 6.0 as the answer. Students did not realise that the "0" signified that the number was being written to 2 significant figures.

Q57.

In part (a) most candidates knew that a million had six zeros, however many incorrectly wrote more or less than six zeros with 80000 and 800000 being common incorrect answers. Candidates should be discouraged from writing commas in large numbers.

In part (b) most candidates correctly wrote seven thousand, one hundred and two. A few candidates incorrectly wrote seventy one thousand and two or wrote seven million one hundred and two.

Part (c) was well attempted but few candidates correctly wrote 15.5. The most common incorrect responses were 15.50 and 15.4

Part (d) was also well attempted and more candidates gained a mark in this part of the question than in part (c), but often few candidates correctly wrote 420. Common incorrect responses included 42 and 400.

Q58.

This question was well attempted with few blank responses seen but many students failed to gain full marks. Those that did correctly identify angles on the diagram which led to $x = 80°$ were on the whole unable to list all the appropriate reasons using correct words. Many students were still incorrectly referring to alternate angles as Z angles, some described a method and others missed key words out of their reasons, the most common of which was the word 'angles'. Weaker students where often able to identify at least one correct angle on the diagram, usually *ABE* = 50°, but then incorrectly labelled *EFB* = 50° or incorrectly labelled *EAF* and *EFB* as 65°. Those that used the diagram were more successful as it was often difficult to identify which angles students were finding from their working out alone.

Q59.

Very few candidates were able to show a clear set of steps starting with correctly identifying the missing sides on the diagram, then adding their terms, arriving at $6x + 10$ and then showing that this factorises to $2(3x + 5)$, however, they did realise that they needed to show some working out and rarely did candidates just offer a purely worded answer.

Many failed to attempt this question leaving a blank response. Some expanded $2(3x + 5)$ but did nothing else so also achieved no marks. A few candidates did start by identifying the missing sides achieving b1 for $x + 2$ or $2x + 3$ and some went on to also achieve m1 for adding the sides, however, there were frequent examples of incorrect simplifying eg $2x + 3 = 5x$ both in candidates working out and written by the diagram.

Some of these candidates did however manage to pick up M1 by demonstrating that they understood that for perimeter they needed to add all the terms for the side lengths though often failed to get A1 as they had incorrectly assigned numbers to the missing sides or incorrect algebraic terms.

Q60.

There were many good answers to this question. Most successful candidates calculated the area of the floor from $2 \times 4.5 + 2 \times 3$ and then found how many 2.25s they needed to just exceed 15. Many candidates attempted this idea but often calculated the perimeter of the shape, by adding up all the numbers in the diagram.

A few candidates decided to work more directly with the covering. They often split the floor into a 2 by 4.5 rectangle and a 2 by 3 rectangle. They then argued that there were 4 packs needed for the large rectangle ($2 \times 4.5 \div 2.25$) and 3 packs for the small rectangle ($3 \times 2 = 6$ and $3 \times 2.25 = 6.75$)