## Sample Exam 4 - Solutions

## SECTION I

1. Write in words, the number represented in the place value chart below.

| Hundreds of <br> Thousands | Tens of <br> Thousands | Thousand | Hundred | Tens | Ones |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 1 | 7 | 0 | 8 | 4 |

Answer $\qquad$ Five hundred and seventeen thousand and eighty-four $\qquad$
2. The number 946 is decreased by 381 . What is the new number?

Answer $\qquad$ 565 $\qquad$
3. Using the digits 1,2 and 7 , form the smallest number which is a multiple of 4 .

127 is not divisible by 4 without having a remaining therefore it is not a multiple of 4 . As a result, the smallest number which can be formed that is a multiple of 4 is 172 .
$\qquad$
4. Calculate $3.26 \times 0.04$

There are 4 total decimal places in both numbers.
Ignore the decimal places and complete the multiplication as if operating on two integers.

|  | H | T | 0 |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| 3 | 2 | 6 |  |
|  |  |  | 4 |
|  | 3 | 0 | 4 |

Rewrite the product with 4 total decimal places.

Answer $\qquad$ 0.1304 $\qquad$
5. Write the missing number in the box below to make the statement correct.

$$
6^{2} \div 4=\square 27 \div 3
$$

$$
6^{2} \div 4=36 \div 4
$$

$$
=9
$$

$$
9=\square \div 3
$$

$$
\square=9 \times 3
$$

$$
=27
$$

6. Arrange the following decimal fractions in descending order.
$\begin{array}{llll}0.31 & 0.13 & 1.3 & 1.03\end{array}$

Descending order means from largest to smallest in magnitude.

| Ones | Tenths | Hundredths |
| :---: | :---: | :---: |
| 0 | 3 | 1 |
| 0 | 1 | 3 |
| 1 | 3 | 0 |
| 1 | 0 | 3 |

1.3 has 1 ones and 3 tenths
1.03 has 1 ones and 3 hundredths
0.31 has 3 tenths and 1 hundredths
0.13 has 1 tenth and 3 hundredths

Answer $\qquad$ $1.3,1.03,0.31,0.13$ $\qquad$
7. $\frac{7}{9}-\frac{2}{3}=$

$$
\frac{7}{9}-\frac{2}{3}
$$

$=\frac{(7 \times 1)-(2 \times 3)}{9}$
$=\frac{7-6}{9}$
$=\frac{1}{9}$

Answer $\frac{1}{9}$
8. Aydon has 9 bills in his wallet with a total value of $\$ 107$.


Write the missing values in the 2 bills above.

Total value of 9 bills = \$107

Value of known bills $=\$ 5+\$ 1+\$ 50+\$ 20+\$ 1+\$ 10+\$ 5$

$$
=\$ 92
$$

Value of unknown bills = \$107-\$92

$$
=\$ 15
$$

Therefore, the unknown bills are a $\$ 5$ and a $\$ 10$ note.
9. If $\frac{7}{12}$ of a number is 56 , what is the number?
$\frac{7}{12}$ of number $=56$
Whole number $=\frac{12}{7} \times 56$

$$
=96
$$

Answer $\qquad$ 96 $\qquad$
10. Four boxes of doughnuts were bought to distribute between the three Standard 5 classes. If each box contained 1 dozen doughnuts, how much doughnuts did each class receive?

1 box $=1$ dozen doughnuts = 12 doughnuts

$$
\begin{aligned}
4 \text { boxes } & =4 \times 12 \\
& =48 \text { doughnuts }
\end{aligned}
$$

Number of Standard 5 classes $=3$
Number of doughnuts each class received $=\frac{\text { Total number of doughnuts }}{\text { Number of classes }}$

$$
\begin{aligned}
& =\frac{48}{3} \\
& =16 \text { doughnuts }
\end{aligned}
$$

Answer $\qquad$ 16
 doughnuts
11. Point $\boldsymbol{A}$ is 3.7 cm to the left of Point $\boldsymbol{B}$. Draw an arrow to show the position of Point $\boldsymbol{A}$.


Position of Point $\mathrm{B}=29.2 \mathrm{~cm}$
Position of Point A $=29.2 \mathrm{~cm}-3.7 \mathrm{~cm}$

$$
=25.5 \mathrm{~cm}
$$

12. Convert 3.65 hours to minutes.

Separating the whole number and the decimal gives:

$$
\begin{aligned}
1 \text { hour } & =60 \mathrm{mins} \\
3 \text { hours } & =3 \times 60 \\
& =180 \mathrm{mins}
\end{aligned}
$$

We need to convert the decimal to a fraction


1 hour $=60 \mathrm{mins}$

$$
\frac{13}{20} \text { hour }=\frac{13}{20} \times 60
$$

$$
=39 \mathrm{mins}
$$

Therefore 3.65 hours $=180 \mathrm{mins}+39 \mathrm{mins}$

$$
=219 \mathrm{mins}
$$

$\qquad$ 219 $\qquad$ minutes
13. An incomplete calendar is given below.

| AUGUST |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Sun | Mon | Tues | Wed | Thur | Fri | Sat |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | 31 | 1 | 2 | 3 |

What day of the week is the $3^{\text {rd }}$ of September?

August has 31 days.

The $3^{\text {rd }}$ of September is a Saturday.

Answer $\qquad$ Saturday $\qquad$
14. The objects shown below balance the scale.

What is the mass of each pineapple?


Mass of 3 pineapples $=$ Mass of pumpkin
Mass of 3 pineapples $=2.4 \mathrm{~kg}$

$$
\begin{aligned}
& =2.4 \times 1000 \\
& =2400 \mathrm{~g}
\end{aligned}
$$

Mass of 1 pineapple $=\frac{2400}{3}$

$$
=800 \mathrm{~g}
$$

Answer $\qquad$ 800 $\qquad$
15. Circle the solid that does not have a uniform cross-section.


Both the triangular prism and cylinder do have a uniform cross-section.

16. The diagram below shows three angles. $A B$ is a straight line.


Calculate the value of $\boldsymbol{y}^{\circ}$.

A straight line $=180^{\circ}$
Angles accounted for in diagram $=90^{\circ}+62^{\circ}$

$$
=152^{\circ}
$$

$y=180^{\circ}-152^{\circ}$

$$
=28^{\circ}
$$

Answer $\qquad$ 28 $\qquad$ -
17. The area of a square is $256 \mathrm{~cm}^{2}$. Calculate the length of ONE of its sides.

Area of square $=256 \mathrm{~cm}^{2}$

Length of one side $=\sqrt{\text { Area of square }}$

$$
\begin{aligned}
& =\sqrt{256} \\
& =16 \mathrm{~cm}
\end{aligned}
$$

Answer $\qquad$ 16 $\qquad$ cm
18. The tally chart below shows the favourite movie of a class of 30 students.

| Movie | Number of Students |
| :---: | :---: |
| Jurassic World | HI II |
| Spiderman 3 | IIII |
| Minions: The Rise of Gru | UH IIII |
| Avengers: Endgame | UH UH |

Name the movie that represents the mode.

Modal means the one that occurs most often.
Based on the tally chart above, Avengers: Endgame represents the mode since the it was the favourite movie of the largest number of students.
$\qquad$ Avengers: Endgame $\qquad$
19. The mean of 7, 9 and 11 is the same as the mean of 13 and $\boldsymbol{a}$.

What number does $\boldsymbol{a}$ represent?

Sum of 7, 9 and $11=7+9+11$

$$
=27
$$

Mean of 7,9 and $11=\frac{\text { Sum of } 7,9 \text { and } 11}{3}$

$$
\begin{aligned}
& =\frac{27}{3} \\
& =9
\end{aligned}
$$

Mean of 7, 9 and $11=$ Mean of 13 and $\mathbf{a}$
Mean of 13 and $\mathbf{a}=9$

$$
\begin{aligned}
13+\mathrm{a} & =(\text { Mean of } 13 \text { and } a) \times 2 \\
& =(\text { Mean of } 13 \text { and } a) \times 2 \\
& =9 \times 2 \\
& =18
\end{aligned}
$$

$$
a=18-13
$$

$$
=5
$$

Answer $\qquad$ 5 $\qquad$
20. The pictograph below shows the preferred breakfast of 56 students.

| Cereal |  |
| :--- | :--- |
| Toast |  |
| Doubles |  |
| Oatmeal |  |

How many students does
 represent?

Number of students $=56$ students

Total number of $=14$

Number of students represent $\begin{aligned} & =\frac{56}{14} \\ & =4 \text { students }\end{aligned}$

Answer $\qquad$ 4 $\qquad$ students

## SECTION II

21. Siam puts three numbers in descending order.

A common fraction belonging to the eighths family is missing. Write the missing fraction.
50\% $\square$ 0.35

The table below shows the eighths family.

| Fraction | Decimal | Percentage |
| :---: | :---: | :---: |
| $\frac{1}{8}$ | 0.125 | $12.5 \%$ |
| $\frac{2}{8}$ | 0.25 | $25 \%$ |
| $\frac{3}{8}$ | 0.375 | $37.5 \%$ |
| $\frac{4}{8}$ | 0.50 | $50 \%$ |
| $\frac{5}{8}$ | 0.625 | $62.5 \%$ |
| $\frac{6}{8}$ | 0.75 | $75 \%$ |
| $\frac{7}{8}$ | 0.875 | $87.5 \%$ |
| $\frac{8}{8}$ | 1.00 | $100 \%$ |

It can be seen that the fraction which is less than $50 \%$ but greater than 0.35 is $\frac{3}{8}$.

Answer $\qquad$
$\qquad$
22. Which two square numbers sum to 80 ?

The square numbers less than 80 include:

| $1^{2}=1$ | $5^{2}=25$ |
| :--- | :--- |
| $2^{2}=4$ | $6^{2}=36$ |
| $3^{2}=9$ | $7^{2}=49$ |
| $4^{2}=16$ | $8^{2}=64$ |

Sum of $4^{2}+8^{2}=16+64$

$$
=80
$$

Answer $\qquad$ 16 and 64 $\qquad$
23. $5 \frac{1}{3}-2 \frac{7}{12}=$

Whole Numbers
$=5-2$
$=3$

+ +12
$=2 \frac{12}{12} \longrightarrow=\frac{(12+4)-7}{12}$
$=\frac{16-7}{12}$
$=\frac{9}{12}$
$=\frac{3}{4}$

24. For every $\$ 15.00$ that Kimani saves, her cousin, Kyle saves $\$ 18.00$. At the end of three months, Kyle saved $\$ 126.00$. How much did Kimani save in the same time?

Total amount saved by Kyle $=\$ 126.00$

Number of times he saved $\$ 18.00=\frac{\$ 126}{\$ 18}$

$$
\begin{aligned}
& =\frac{\$ 126}{\$ 18} \\
& =7
\end{aligned}
$$

Amount saved by Kimani $=7 \times \$ 15.00$

$$
=\$ 105.00
$$

Answer \$ $\qquad$ 105 $\qquad$
25. A school has 189 boys and 252 girls. If 9 girls are added to the school, what percentage of the school will be girls?

Initial number of girls in school $=252$ girls
Final number of girls in school $=252+9$

$$
=261 \text { girls }
$$

Initial number of students in school $=189+252$

$$
=441 \text { students }
$$

Final number of students in school $=441+9$

$$
=450 \text { students }
$$

Percentage of the school that will be girls $=\frac{\text { Final number of girls in school }}{\text { Final number of students in school }} \times 100$

$$
=\frac{261}{450} \times 100
$$

Answer $\qquad$ 58 \%
26. The public library in San Fernando charges $\$ 2.50$ per book per day for returning books late.

Halley paid $\$ 50.00$ for returning 5 books late. The books were all borrowed on the same day.
Calculate the number of days the books were overdue.

Total late fee paid $=\$ 50.00$
Number of books $=5$

Late fee paid per book $=\$ 50.00 \div 5$

$$
=\$ 10.00
$$

Late fee per day $=\$ 2.50$
Number of days each book was overdue $=\frac{\text { Late fee paid per book }}{\text { Late fee per day }}$

$$
=\frac{\$ 10.00}{\$ 2.50}
$$

$=4$ days

Answer 4 $\qquad$ days
27. Complete the shape using $\boldsymbol{P Q}$ as the line of symmetry.

28. Celine used 17 m of cloth to make shirts and pants for her son. She used 92 cm of cloth to make each pair of pants and 60 cm of cloth to make each shirt. She made an equal number of pants and shirts. If she has 28 cm remaining, how many pants and shirts did she make?

Total length of cloth $=17 \mathrm{~m}$

$$
=1700 \mathrm{~cm}
$$

Remaining cloth $=28 \mathrm{~cm}$

Length of cloth that was used $=1700-28$

$$
=1672 \mathrm{~cm}
$$

Length of cloth needed to make BOTH a pair of pants and a shirt $=92+60$

$$
=152 \mathrm{~cm}
$$

Number of pants and shirts made $=\frac{\text { Length of cloth that was used }}{\text { Length of cloth needed to make BOTH a pair of pants and a shirt }}$

$$
=\frac{1672}{152}
$$

$=11$ pairs of pants and 11 shirts

Answer $\qquad$ 11 pairs of pants and 11 shirts $\qquad$
29. The signs below were displayed by two market vendors.

| Mr. Wilson's |  |
| :---: | :---: |
| Tomatoes |  |
| $\$ 31.50$ per 750 g | Mr. Hernandez's <br> Tomatoes |
| $\$ 10.00$ per $\frac{1}{4} \mathrm{~kg}$ |  |

(a) What will be the cost of 1 kg of Mr. Wilson's tomatoes?
$1 \mathrm{~kg}=1000 \mathrm{~g}$
1000 g of Mr. Wilson's tomatoes $=\frac{1000}{750} \times \$ 31.50$

$$
=\$ 42.00
$$

Answer \$ $\qquad$ 42 $\qquad$
(b) Which market vendor is selling their tomatoes at a cheaper price?

1 kg of Mr. Wilson's tomatoes $=\$ 42.00$

$$
\begin{aligned}
\frac{1}{4} \mathrm{~kg} \text { of Mr. Hernandez's tomatoes } & =\$ 10.00 \\
1 \mathrm{~kg} \text { of Mr. Hernandez's tomatoes } & =\frac{4}{1} \times \$ 10.00 \\
& =\$ 40.00
\end{aligned}
$$

$\qquad$ Mr. Hernandez $\qquad$
30. Atiya left work at the time shown on the clock below. She arrived at home 35 minutes later.
(a) On the same clock, draw the new position of the minute hand when she arrived at home.


The time shown on the clock is 6:25.
Time Atiya arrived home $=6: 25+0: 35$
= 7:00
(b) Through what angle did the minute hand turn?

A circle has $360^{\circ}$.
The circle is divided equally into twelve angles at the centre.
Angle between any 2 numbers next to each other $=\frac{360^{\circ}}{12}$

$$
=30^{\circ}
$$

The number of $30^{\circ}$ angles between 5 and 12 on the clock above is 7.
Therefore, angle the minute hand turned $=30^{\circ} \times 7$

$$
=210^{\circ}
$$

Answer $\qquad$ 210 $\qquad$ degrees
31. Crissa bought an iPad for $\$ 3000$ and later resold it to Shinia for $\$ 3550$.
(a) What was the percentage profit on the sale?

$$
\begin{aligned}
& \text { Cost Price of iPad }=\$ 3000 \\
& \text { Selling Price of iPad }=\$ 3550 \\
& \text { Profit = Selling Price }- \text { Cost Price } \\
& =\$ 3550-\$ 3000 \\
& =\$ 550 \\
& \text { Percentage profit }=\frac{\text { Profit }}{\text { Cost Price }} \times 100 \\
& \qquad=\frac{550}{3000} \times 100 \\
& =18 \frac{1}{3} \%
\end{aligned}
$$

Answer $\qquad$ $18 \frac{1}{3}$ $\qquad$ \%
(b) If Shinia negotiated a discount of $20 \%$, calculate the value of the discount she received.

Value of discount $=\frac{20}{100} \times \$ 3550$

$$
=\$ 710
$$

$\qquad$ 710 $\qquad$


Area of 1 square $=2 \times 2$

$$
=4 \mathrm{~cm}^{2}
$$

Number of squares in shaded figure $=15$ squares

Area of shaded figure $=$ Number of squares in shaded figure $\times$ Area of 1 square

$$
\begin{aligned}
& =15 \times 4 \mathrm{~cm}^{2} \\
& =60 \mathrm{~cm}^{2}
\end{aligned}
$$

$\qquad$ 60 $\qquad$ $\mathrm{cm}^{2}$

33. Faith and her 5 cousins decided to go to MovieTowne. Each cousin spent $\$ 50.00$ on a movie ticket. They met 3 friends and bought popcorn for everyone at $\$ 12.50$ each.

What was the total amount of money spent?

Number of movie tickets bought $=$ Faith +5 cousins

$$
\begin{aligned}
& =1+5 \\
& =6 \text { movie tickets }
\end{aligned}
$$

One movie ticket cost $\$ 50.00$.
Cost of 6 movie tickets $=6 \times \$ 50.00$

$$
=\$ 300.00
$$

Number of popcorns bought $=6+3$

$$
=9 \text { popcorns }
$$

One popcorn cost $\$ 12.50$.
Cost of 9 popcorns $=9 \times \$ 12.50$

$$
=\$ 112.50
$$

Total amount of money spent $=\$ 300.00+\$ 112.50$

$$
=\$ 412.50
$$

Answer \$ $\qquad$ 412.50 $\qquad$
34. The diagram below shows a bottle of flu medication and a dosage cup.


Jonathon was instructed by his doctor to take 3 doses per day for 5 days.
If each dose is 15 ml , how many millilitres of the flu medication was there remaining in the bottle after the 5 days had elapsed?

Volume of flu medication in bottle $=0.28 \mathrm{~L}=280 \mathrm{ml}$

Volume of each dose $=15 \mathrm{ml}$
Number of doses per day $=3$
Number of doses taken in 5 days $=3 \times 5$

$$
=15 \text { doses }
$$

Volume of 15 doses taken in 5 days $=$ Volume of each dose $\times 15$

$$
\begin{aligned}
& =15 \times 15 \\
& =225 \mathrm{ml}
\end{aligned}
$$

Volume of flu medication remaining in the bottle $=280-225$

$$
=55 \mathrm{ml}
$$

Answer $\qquad$ 55 $\qquad$ millilitres
35. Complete the table below.

| Solid | Number of Faces | Number of Edges | Number of Vertices |
| :---: | :---: | :---: | :---: |
| Cylinder | 3 |  |  |
| Sphere___ |  |  | 0 |
|  | 1 | 0 | 0 |
| Triangular Prism | 5 | 9 |  |

36. Rainfall was recorded in Trinidad for 5 days as shown in the table below.

| Day | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Rainfall (mm) | 225 | 190 | 240 | 235 | 205 |

If the average rainfall was 220 mm at the end of day 6 , how many millimetres of rain fell on Day 6?

Average rainfall at end of Day $6=220 \mathrm{~mm}$

Total rainfall for 6 days $=$ Average rainfall at end of Day $6 \times 6$

$$
\begin{aligned}
& =220 \times 6 \\
& =1320 \mathrm{~mm}
\end{aligned}
$$

Total rainfall for 5 days $=225+190+240+235+205$

$$
=1095 \mathrm{~mm}
$$

Therefore, Day 6 rainfall $=$ Total rainfall for 6 days - Total rainfall for 5 days

$$
\begin{aligned}
& =1320-1095 \\
& =225 \mathrm{~mm}
\end{aligned}
$$

Answer $\qquad$ 225 $\qquad$ mm

SECTION III
37. Malachi has $50 \%$ of the amount of Roblox points Yeriel has, and Matthew has $\frac{2}{5}$ of the amount of Roblox points Malachi has. If Yeriel has 2248 more Roblox points than Matthew, how many Roblox points does Malachi have?

$$
50 \%=\frac{1}{2}
$$



$$
\text { Matthew }=2 \text { parts }
$$

Yeriel $=10$ parts

We know Yeriel has 2248 more Roblox points tha Matthew.

10 parts -2 parts $=2248$ Roblox points

$$
8 \text { parts }=2248 \text { Roblox points }
$$

1 part $=\frac{2248}{8}$
$=281$ Roblox points

Number of Roblox points Malachi has $=5 \times 281$

$$
=1405 \text { Roblox points }
$$

$\qquad$
$\qquad$ points
38. In ONE day Patricia's bakery produces 45 loaves of bread, while Jamie's bakery produces 12 more loaves of bread than Patricia's bakery.
(a) How many loaves of bread did BOTH bakeries produce in one day?

No. of loaves produced by Patricia's bakery in one day $=45$ loaves

No. of loaves produced by Jamie's bakery in one day $=45+12$

$$
=57 \text { loaves }
$$

No. of loaves BOTH bakeries produced in 1 day $=45+57$

$$
=102 \text { loaves }
$$

Answer $\qquad$ 102 $\qquad$ loaves of bread
(b) Both bakeries operate 6 days per week.

How many more loaves of bread were produced by Jamie's bakery than by Patricia's bakery in 1 week?

No. of days in 1 week $=6$ days

No. of loaves produced by Patricia's bakery in 1 day $=45$ loaves
No. of loaves produced by Patricia's bakery in 6 days $=45 \times 6$

$$
=270 \text { loaves }
$$

No. of loaves produced by Jamie's bakery in 1 day $=57$ loaves
No. of loaves produced by Jamie's bakery in 6 days $=57 \times 6$

$$
=342 \text { loaves }
$$

Difference $=342-270$

$$
=72 \text { loaves }
$$

Answer $\qquad$ 72 $\qquad$ loaves of bread
(c) Both bakeries produced a total of 816 loaves of bread. How many days did it take them to do so?

Total number of loaves produced by both bakeries $=816$ loaves

No. of loaves BOTH bakeries produce in 1 day = 102 loaves

No. of days taken to produce 816 loaves $=\frac{816}{102}$

$$
=8 \text { days }
$$

Answer $\qquad$ 8 $\qquad$ days
39. The diagram below shows a garden with a 2 m wide path.

(a) Calculate the perimeter of the garden.

Perimeter of garden $=(L+W) \times 2$

$$
\begin{aligned}
& =(15+12) \times 2 \\
& =27 \times 2 \\
& =54 \mathrm{~m}
\end{aligned}
$$

Answer $\qquad$ 54 $\qquad$ m
(b) Calculate the area of the path.

Length of the enclosed garden $=($ Length of garden $+2+2) \mathrm{m}$

$$
\begin{aligned}
& =(15+2+2) \mathrm{m} \\
& =19 \mathrm{~m}
\end{aligned}
$$

Width of the enclosed garden $=($ Width of garden $+2+2) m$

$$
\begin{aligned}
& =(12+2+2) \mathrm{m} \\
& =16 \mathrm{~m}
\end{aligned}
$$

Area of enclosed garden $=$ Length $\times$ Width

$$
\begin{aligned}
& =19 \times 16 \\
& =304 \mathrm{~m}^{2}
\end{aligned}
$$

Area of garden $=$ Length $\times$ Width

$$
\begin{aligned}
& =15 \times 12 \\
& =180 \mathrm{~m}^{2}
\end{aligned}
$$

Area of path $=$ Area of enclosed garden - Area of garden

$$
\begin{aligned}
& =304 \mathrm{~m}^{2}-180 \mathrm{~m}^{2} \\
& =124 \mathrm{~m}^{2}
\end{aligned}
$$

Answer $\qquad$ 124 $\qquad$ $m^{2}$
BUY 4 AND GET 1 FREE

Each pen costs $\$ 15$. Jaylon purchased $\$ 120.00$ worth of pens.
(a) How many free pens did he get?

Amount Jaylon spent $=\$ 120.00$
Cost of 1 pen $=\$ 15.00$
Number of pens purchased by Jaylon $=\frac{\text { Amount Jaylon spent }}{\text { Cost of } 1 \text { pen }}$

$$
\begin{aligned}
& =\frac{\$ 120.00}{\$ 15.00} \\
& =8 \text { pens }
\end{aligned}
$$

If after every 4 pens purchased 1 pen is given free:

Number of free pens Jaylon received $=8 \div 4$

$$
=2 \text { pens }
$$

Answer $\qquad$ 2 $\qquad$ pens
(b) How many pens did he get altogether for his $\$ 120.00$ ?

Number of pens Jaylon purchased with $\$ 120.00=8$ pens
Number of pens Jaylon received for free $=2$ pens

Total number of pens Jaylon got $=8+2$

$$
=10 \text { pens }
$$

Answer $\qquad$ 10 $\qquad$ pens
(c) Jaylon's friend, Avery, also purchased the pens that were on sale.

He received 35 pens altogether. How much money did he spend?

Total number of pens Avery received $=35$ pens

No. of pens received every time 4 pens are bought $=4$ pens +1 free pen

$$
=5 \text { pens }
$$

Groups of 4 pens bought by Avery $=\frac{\text { Total number of pens Avery received }}{\text { No.of pens received every time } 4 \text { pens are bought }}$

$$
\begin{aligned}
& =\frac{35}{5} \\
& =7 \text { groups }
\end{aligned}
$$

Therefore, number of pens bought by Avery $=7 \times 4$

$$
=28 \text { pens }
$$

One pen cost $\$ 15$.

Money spent by Avery $=28 \times \$ 15$

$$
=\$ 420
$$

Answer \$ $\qquad$

