

7. Solve the following pair of simultaneous equations.

$$\begin{aligned} y &= 4x + 1 \\ 2x + y &= 4 \end{aligned} \quad [5]$$

$$x =$$

$$y =$$

7. At a time when the exchange rate of US currency to Guyanese currency is US\$1 = GUY\$208.65

(a) Cherelle converts US\$500 to GUY\$. How much does she receive in GUY\$? [1]

(b) Cherelle spends GUY\$77,617.80 and converts the remaining amount to US\$. How much does she receive in US\$? [3]

Unspent Guyanese Dollars = \$

U.S. Dollars Received = \$

7. Samantha leaves home at 7:55 a.m. and drives 75 km to work at an average speed of 60 km/h. It takes 15 minutes for her to walk from the parking lot at work to her office. Determine her arrival time at the office. [4]

Time Taken To Drive **hours** **minutes**

Arrival Time

7. Rewrite the following statements using inequality symbols.

(a) y is at most 16. [1]

$$y \leq 16$$

$$y \geq 16$$

$$y < 16$$

$$y > 16$$

(b) z is greater than 0 but less than 9. [2]

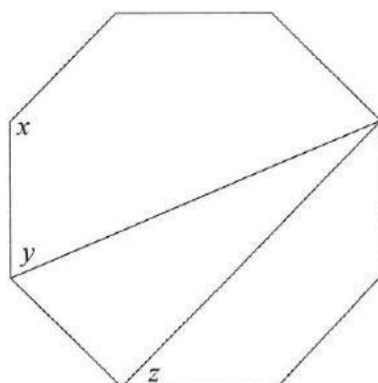
$$0 \leq z \leq 9$$

$$0 \leq z < 9$$

$$0 < z \leq 9$$

$$0 < z < 9$$

7. The polygon below represents a regular octagon.

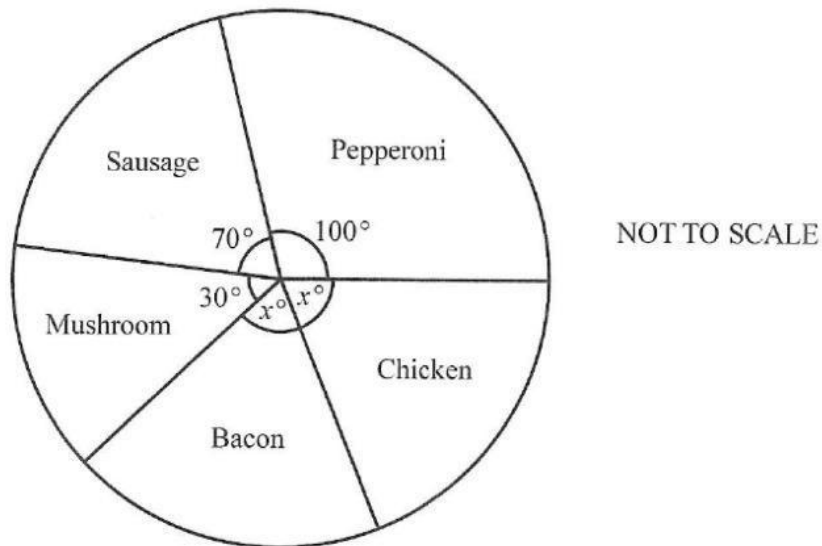


NOT TO SCALE

Calculate the following angles. You must show your working.

- (a) x [2]
 (b) y [1]
 (c) z [2]

7. A group of 252 students were asked to pick their favourite pizza toppings. The same number of students picked Bacon and Chicken. The results are shown in the pie chart below.



- (a) Calculate
 (i) the angle x . [3]
 (ii) how many more students liked Pepperoni than Mushrooms. [3]
 (b) Write, in lowest terms, the fraction of students who liked Sausage [1]

Unreduced Fraction

Reduced Fraction

$A \cap B$

$A \cup B$

$(A \cap B)'$

$(A \cup B)'$

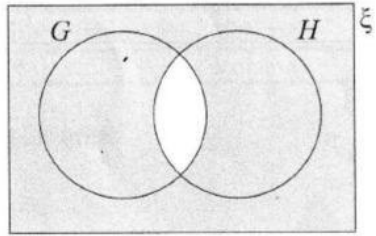
$C' \cap D$

$C \cap D'$

7. Use set symbols to identify the shaded regions:

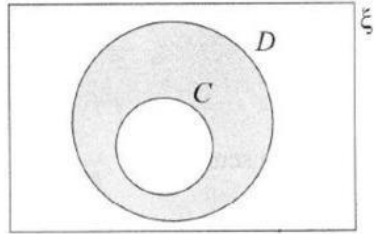
- (a) [1]

(b)



[1]

(c)



[1]