

## QUIZ – Chapter 5 Part I

1. In the following situations, determine which of the variables is independent, and which one is dependent.

a)  $p = 2\pi r$       $p$ : dependent      $r$ : independent

b)

$a$	$P$
1	-4
2	0
3	2

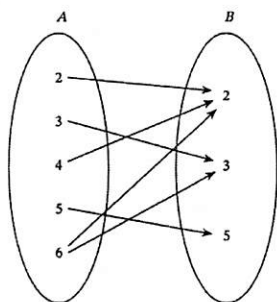
$P$ : dependent

$a$ : independent

- c) The relation between the number of candies eaten and the number of corresponding calories.

number of calories: dependent  
number of candies: independent

d)



$B$ : dependent

$A$ : independent

2. Let  $f(x) = -2x + 3$

- a) Determine  $f(0)$  and  $f(-5)$

$$\begin{aligned} f(0) &= -2(0) + 3 \\ &= 3 \end{aligned}$$

$$\begin{aligned} f(-5) &= -2(-5) + 3 \\ &= 10 + 3 \\ &= 13 \end{aligned}$$

- b) Determine  $x$  such that  $f(x) = 0$

$$\begin{aligned} -2x + 3 &= 0 \\ -2x &= -3 \end{aligned}$$

$$\boxed{x = \frac{3}{2}}$$

- c) Determine  $x$  such that  $f(x) = -5$

$$\begin{aligned} -2x + 3 &= -5 \\ -2x &= -8 \end{aligned}$$

$$\boxed{x = 4}$$

Area of a Triangle

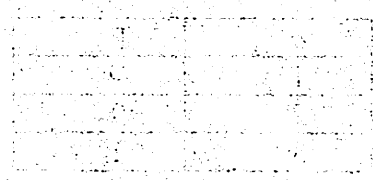
Area of a triangle =  $\frac{1}{2} \times \text{base} \times \text{height}$

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Example 1

Example 2

Example 3



Example 4

Area of a triangle =  $\frac{1}{2} \times \text{base} \times \text{height}$

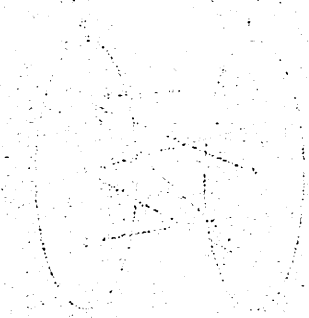
Area of a triangle =  $\frac{1}{2} \times \text{base} \times \text{height}$

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Example 5

Example 6

Example 7



Example 8

Area of a sector =  $\frac{\theta}{360} \times \pi r^2$

Example 9

Example 10

$$A = \frac{1}{2}bh$$

$$A = \frac{1}{2}bh$$

Area of a sector =  $\frac{\theta}{360} \times \pi r^2$

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Area of a sector =  $\frac{\theta}{360} \times \pi r^2$

3. Determine the domain and range of the following relations:

a) Ordered pairs:  $\{(1,5), (2, 10), (3, 10), (4, 15)\}$

$D = \{1, 2, 3, 4\}$

$R = \{5, 10, 15\}$

b) 

Number of fingers with rings on them <i>that a student has</i>
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Number of students in a class of 25
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$D = \{0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$

$R = \{0, 1, 2, \dots, 25\}$

c)

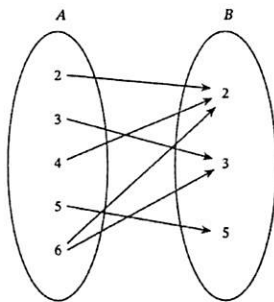
a	P
1	-4
2	0
3	2

$D = \{1, 2, 3\}$

$R = \{-4, 0, 2\}$

4

d)



$D = \{2, 3, 4, 5, 6\}$

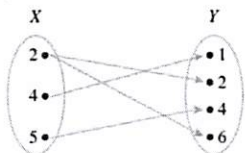
$R = \{2, 3, 5\}$

4. Determine if the following relations are functions:

a)  $\{(1,5), (2, 10), (3, 10), (4, 15)\}$

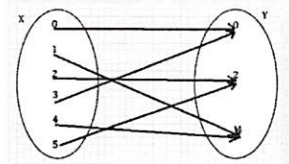
yes

b)



no

c)



yes

2

d)

Name of polygons	Number of sides
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yes

$$\{x_1, x_2, x_3, x_4\} = d$$

$$\{x_1, x_2, x_3, x_4\} = d$$

$$\{x_1, x_2, x_3, x_4, x_5, x_6, x_7, x_8\} = d$$

$$\{x_1, x_2, x_3, x_4, x_5, x_6, x_7, x_8\} = A$$

$$\{x_1, x_2, x_3\} = d$$

$$\{x_1, x_2, x_3, x_4\} = d$$

$$\{x_1, x_2, x_3, x_4, x_5\} = d$$

$$\{x_1, x_2, x_3, x_4, x_5\} = d$$

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16



Handwritten text and faint diagrams at the bottom of the page.

5. Judith works for a company that sells Tupperware. She gets paid \$50 when she organizes an event, and then she gets \$10 for each \$100 she sells at the event.
- a) Write an equation to model her revenue ( $R$  in \$) for an event she organizes as a function of her sales there ( $x$  in \$100 's).

$$R = 50 + 10x$$

- b) Determine  $R(5)$  and say what it represents in this story.

$$\begin{aligned} R(5) &= 50 + 10(5) \\ &= 100 \end{aligned}$$

She gets \$100 if she organizes an event and makes \$500 in sales there.

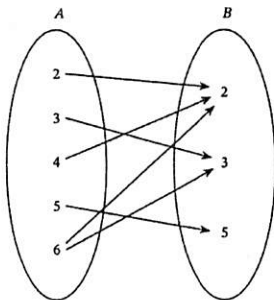
- c) Solve  $R(x) = 180$  and say what it represents in this story.

$$\begin{aligned} 180 &= 50 + 10x \\ 10x &= 130 \\ x &= 13 \end{aligned}$$

She needs to make \$1300 worth of sales to make \$180 at an event.

6. Rewrite these relations in ordered pairs:

a)



$\{(2,2); (3,3); (4,2); (5,5); (6,2); (6,3)\}$

b)

$a$	$P$
1	-4
2	0
3	2

$\{(1,-4); (2,0); (3,2)\}$

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be supported by a valid receipt or invoice. This ensures transparency and allows for easy verification of the data.

In the second section, the author outlines the process of reconciling the accounts. This involves comparing the internal records with the bank statements to identify any discrepancies. If a difference is found, it is crucial to investigate the cause immediately to prevent further errors.

The final part of the document provides a summary of the key points discussed. It reiterates that consistency and accuracy are the most important factors in financial record-keeping. By following these guidelines, businesses can ensure their financial health is properly documented and managed.

(1) (2) (3) (4) (5) (6) (7) (8) (9) (10)

Financial Statement