Pretest DA

MTH-P024

Information

The use of the calculator is allowed

Formulas:

SQUARE

Area	A=s^2	s=side
Perimeter	P=4s	

CIRCLE

Area	A=$\Pi\ r^2$	Π= 3.1416
Perimeter or circumference	C=2Πr	

1foot square = 0.092903 m²

(4 points)

1) Find two equivalent fractions for each of the following:

a. $\frac{2}{3}$ **=**

b. $\frac{1}{8}$ **=**

(2 points)

2) Find the missing number x that will make the two fractions equivalent:

$\frac{4}{3} = \frac{16}{x}$ **x=**

(2 points)

3) Convert the improper fraction below to a mixed number:

$\frac{24}{5}$ =

(4 points)

4) Convert these mixed numbers to improper fractions:

$3\frac{1}{4}$ =

$6\frac{9}{12}$ =

(3points)

5) Add the following:

$$\frac{3}{8} + \frac{2}{5} =$$

(3 points)

6) Subtract the following:

$$\frac{3}{5} - \frac{1}{3} =$$

(4 points)

7) Felix went fruit-picking and picked $\mathbf{2}\frac{1}{4}$ Kg of strawberries and $\frac{5}{4}$ Kg of raspberries.

How many kilograms of berries did Felix pick in all?

(10 points)

8) Calculate the following products and quotients.

(Simplify the final answers.)

a) $\frac{2}{15} \times \frac{1}{6} =$

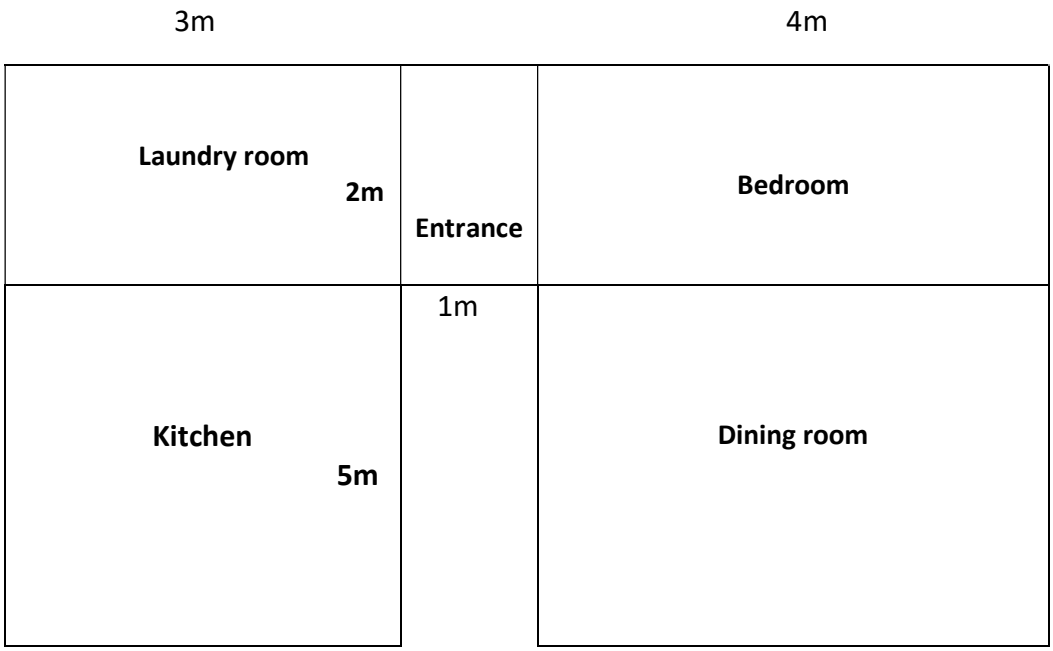
b) $\frac{7}{6} \times \frac{18}{5} =$

c) $\frac{5}{8} \div 3 =$

d) $\frac{11}{3} \div \frac{31}{10} =$

(15 points)

9) Examine the plan of the house below. Find the perimeter and area of each room and complete the table. Do your calculations on the next page. (Don't forget to apply the units of measure.)



	Length	Width	Perimeter	Area
Bedroom				
Kitchen				
Entrance				
Laundry room				
Dining room				

(4 points)

10) Find the area of the following:

a. The area of a triangle whose base is 6 cm and whose height is 9 cm?

b. The area of a square with a side length of 12 cm?

(4 points)

11) What is the total area of 8 circular garden beds, if each bed has a radius of 1.8m?

(6points)

12) Measure the following angles:
(use your protractor)

a)

b)

(4 points)

13) Draw the following angles with a protractor:

a) 65°

b) 125°

(4 points)

14) Convert the following measurements:

$5m^2$ into ---------- ft^2

$22ft^2$ into ---------- m^2

(15 points)

15) Samara rolled a dice and recorded the number each time.

5	3	8	2	5
4	3	6	2	4
5	5	8	6	3

a) Construct a frequency table using the above data:

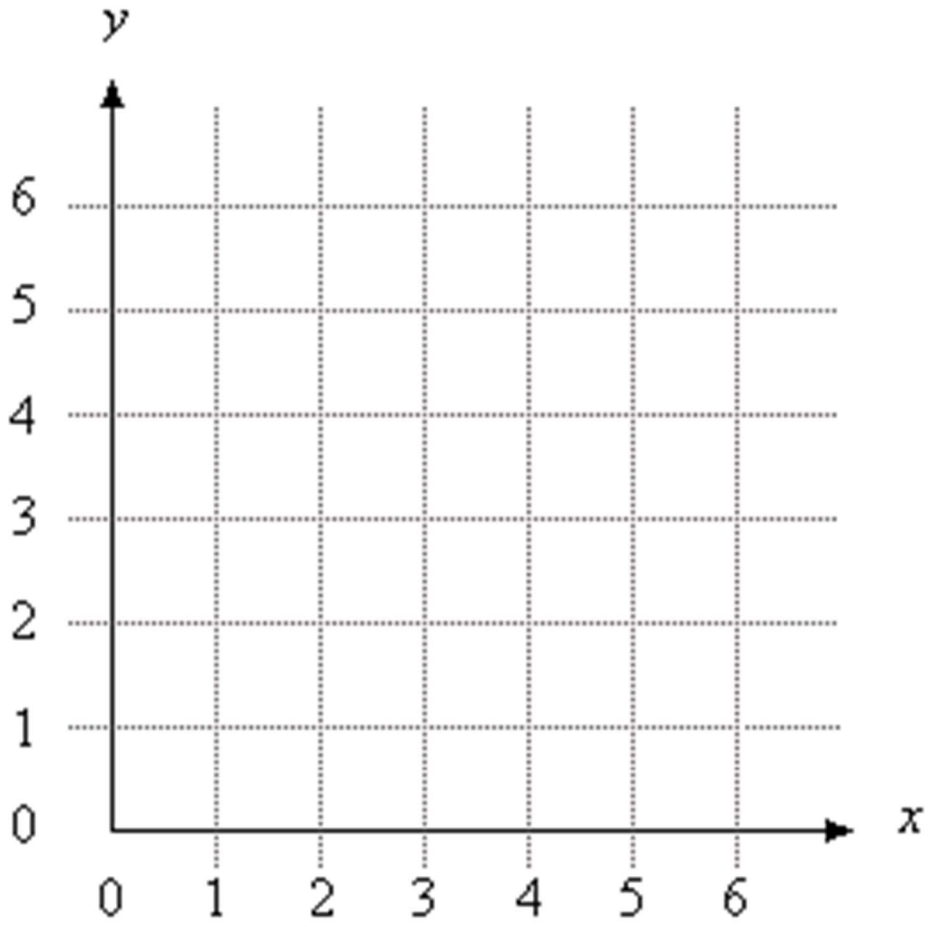
Dice number	**Frequency**

b) What title would you give to this table?

c) What are the quantified objects?

d) What are the statistical data?

e) Create a bar graph to represent the results of rolling the dice. (Include a title and label the axes).



(5 points)

16)

Di passed 4 exams in Math this September.

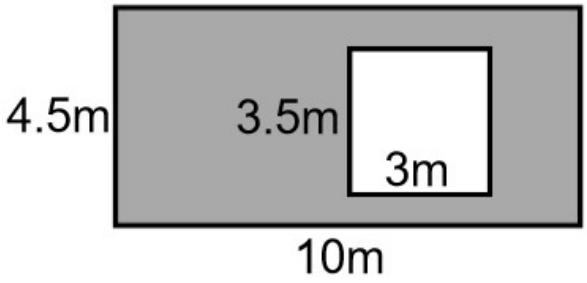
In the first week she scored 84%, in the second week she scored 90%, in the third week she got 95% and in the last week she got 92%.

Calculate the average of her grade for the whole month.

(5 points)

17)

Calculate the Area of the shaded part of the following diagram:



(5 points)

18)

Find the scale of the following drawing. Then use the scale to calculate the length of the base and the height of the triangle.