تم تحميل هذا الملف من موقع المناهج الإماراتية	
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الملف القوانين الهامة منهج ريفيل مع تدريبات
موقع المناهج ⇦ المناهج الإماراتية ⇦ الصف الثامن ⇦ رياضيات ⇦ الفصل الثالث

روابط مواقع التواصل الاجتماعي بحسب الصف الثامن			
روابط مواد الصف الثامن على تلغرام			
التربية الاسلامية	اللغة العربية	اللغة الانجليزية	الرياضيات

المزيد من الملفات بحسب الصف الثامن والمادة رياضيات في الفصل الثالث	
1	أسئلة الامتحان النهائي الالكتروني ريفيل
2	حل أسئلة الامتحان النهائي الورقي بريدج
3	أسئلة الامتحان النهائي الالكتروني ريفيل
4	أسئلة الامتحان النهائي الالكتروني بريدج
5	أسئلة الامتحان النهائي الورقي بريدج

G08_Module 9_Skills to Focus on

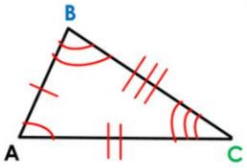
Lesson 1: Congruence and Transformations

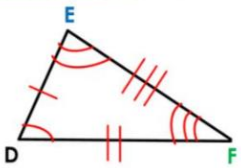
- Congruent figures have: Same shape, Same angles and Same size
- Congruent transformations are:

Reflection (flip), Rotation (turn), Translation (slide)

Lesson 2: Congruence and Corresponding Parts

Corresponding parts are parts of figures that match.





Corresponding sides

$\overline{AB} \cong \overline{DE}$

$\overline{BC} \cong \overline{EF}$

$\overline{AC} \cong \overline{DF}$

Corresponding angles

$< A \cong < D$

$< B \cong < E$

$< C \cong < F$

Lesson 3: Similarity and Transformations

- Similar figures have: Same shape & angles but not always Same size
- Similar transformations are:

Reflection (flip), Rotation (turn), Translation (slide) & Dilation (sizing)

- Similar triangles have proportional sides with the same scale factor

$$Scale\ Factor = \frac{image}{preimage}$$

Lesson 4: Similarity and Corresponding Parts

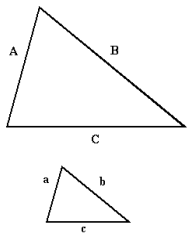
When triangles are similar

- Their angles are the same
- Their lengths are proportional
- Angle-Angle Similarity (AAS) says that if any two angles of a triangle are equal to any two angles of another triangle, then the two triangles are similar.

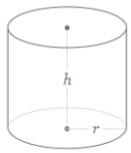
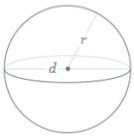
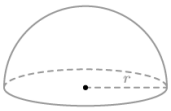
Lesson 5: Indirect Measurement

When triangles are similar, a proportion equation can be written to find an unknown side.

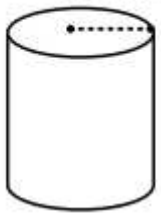
$$\frac{\text{big}}{\text{small}} : \frac{A}{a} = \frac{B}{b} \qquad \frac{48}{21} = \frac{81}{b} \qquad b = \frac{21 \times 81}{48}$$



G08_Module 10_Skills to Focus on

Shape	Shape diagram	Volume Formula	Dimensions of Measurement	Finding r formula	Finding h formula
Cylinder		$V = \pi r^2 h$	r = radius h = height	$r = \sqrt{\frac{V}{\pi h}}$	$h = \frac{V}{\pi r^2}$
Cone		$V = \frac{1}{3}\pi r^2 h$	r = radius h = height	$r = \sqrt{\frac{3V}{\pi h}}$	$h = \frac{3V}{\pi r^2}$
Sphere		$V = \frac{4}{3}\pi r^3$	r = radius	$r = \left(\frac{3V}{4\pi}\right)^{\frac{1}{3}}$	
A Hemisphere is HALF a sphere		$V = \frac{2}{3}\pi r^3$		$r = \left(\frac{3V}{2\pi}\right)^{\frac{1}{3}}$	

1. What is the volume of the cylinder?



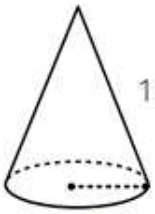
Formula:_____

Plug in values:_____

6433. cm³

Volume:_____

2. What is the volume of the cone?



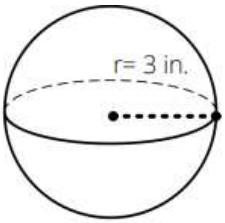
Formula:_____

Plug in values:_____

94.25 in³

Volume:_____

3. What is the volume of the sphere?



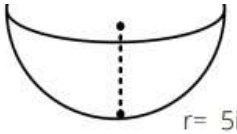
Formula:_____

Plug in values:_____

.113.10 in³

Volume:_____

4. Find the volume of the hemisphere?



Formula:_____

Plug in values:_____

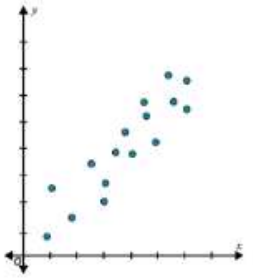
261.80 in³

Volume:_____

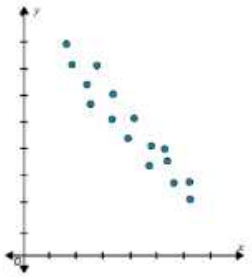
G08_Module 11_Skills to Focus on

Scatter Plots & Line of Best Fit

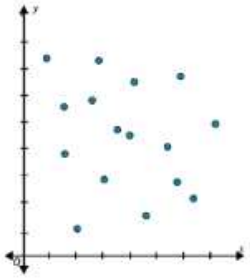
A scatter plot is a graph that shows bivariate data with two variables.
Associations: Positive vs Negative, No Association, Linear vs Nonlinear



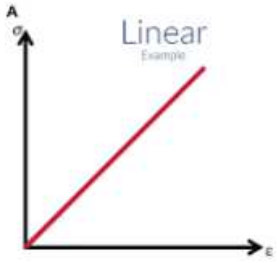
Positive Association when *x* increases, *y* increases.

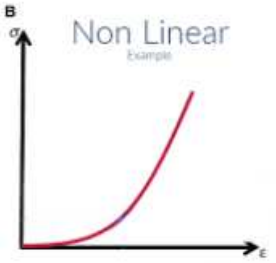


Negative Association when *x* increases, *y* decreased.



No Association no pattern in the points.



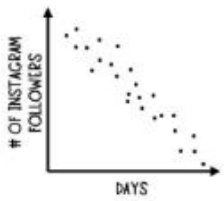


Interpret or Describe Scatter plots by using the axis to say what happens as x increases. What happens to y?

1.

Description:
As the days increase, the # of followers decreases.
Association:
Negative

Linear vs. Non-Linear: Linear

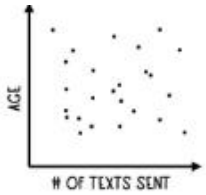


2.

Description:
No relationship between # of texts sent and age

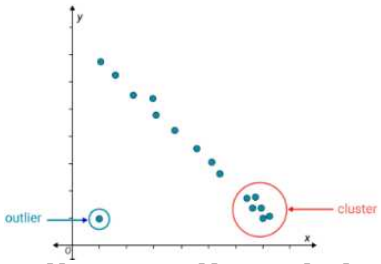
Association:
No Association

Linear vs. Non-Linear: Non-Linear



Parts of a Scatter plot

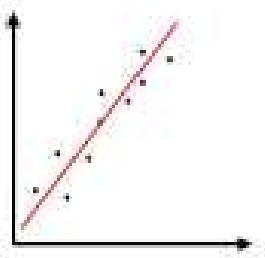
- Cluster- a group close together
- Outlier- a point far away from others



A Line of Best Fit best represents the points on the scatter plot.

The line should go through the middle of the points and there should be equal amounts of points above and below the line.

Lines of best fit are used to predict information from the scatter plot.
If the information is on the graph, we can tract the points
If the information is not on the graph, we use the equation of a line



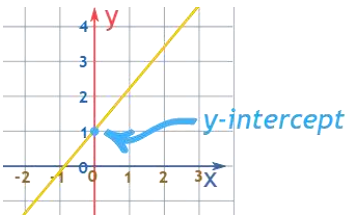
Equation of a line: Slope-Intercept Form

$y = mx + b$

slope — y-intercept

Slope Formula

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

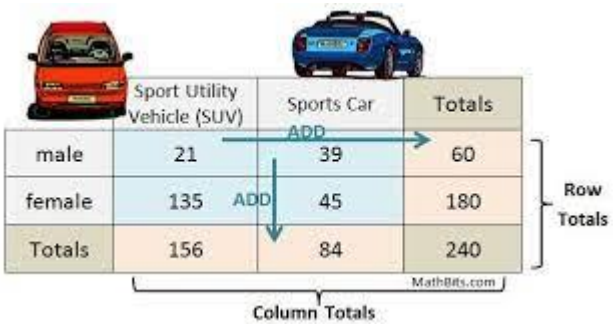


Substitute the value given into the equation to get the ordered pair

G08_Module 11_Skills to Focus on

Two Way Tables

A two-way table can be constructed to represent data from a sample that relates two different categories to get 4 data points.



The total represent the number present in each category.

- Each row must add up to its totals
- Each column must add up to its total.

One category is represented by rows: gender (male or female)
One category is represented by columns: type of car (SUV or Sports)

Relative Frequency

A two-way table can show ratios or percentages of data values called relative frequencies. We find them by dividing each part by total.

$$RATIO = \frac{PART}{TOTAL}$$

Percentage = Ratio × 100

Dividing by Row total gives Row Relative Frequency

	Job	No Job	Total
Painting Club	$\frac{4}{21} \approx 0.19$	$\frac{17}{21} \approx 0.81$	$\frac{21}{21} = 1.00$
No Painting Club	$\frac{18}{65} \approx 0.28$	$\frac{47}{65} \approx 0.72$	$\frac{65}{65} = 1.00$
Total			

Dividing by Column total gives Column Relative Frequency

	Job	No Job	Total
Painting Club	$\frac{4}{22} \approx 0.18$	$\frac{17}{64} \approx 0.27$	
No Painting Club	$\frac{18}{22} \approx 0.82$	$\frac{47}{64} \approx 0.73$	
Total	$\frac{22}{22} = 1.00$	$\frac{64}{64} = 1.00$	

Associations in Two-Way Tables

- No association
  equal frequencies
- Weak association
  small difference in frequencies
- Strong association
  large difference in frequencies

Strong association

	Animated	Not Animated
Adults	0.13	0.21
Students	0.87	0.79
Total	1.00	1.00

No association

	Animated	Not Animated
7th grade	0.40	0.40
8th grade	0.60	0.60
Total	1.00	1.00