

شكراً لتحميلك هذا الملف من موقع المناهج الإماراتية



## مراجعة أسئلة وفق الهيكل الوزاري الجديد

موقع المناهج ← المناهج الإماراتية ← الصف العاشر العام ← رياضيات ← الفصل الثالث ← الملف

## التواصل الاجتماعي بحسب الصف العاشر العام



## روابط مواد الصف العاشر العام على تلغرام

[الرياضيات](#)

[اللغة الانجليزية](#)

[اللغة العربية](#)

[التربية الاسلامية](#)

## المزيد من الملفات بحسب الصف العاشر العام والمادة رياضيات في الفصل الثالث

[بنك أسئلة وفق الهيكل الوزاري متبوعة بالقوانين الهامة](#)

1

[حل أسئلة الامتحان النهائي الالكتروني بريدج](#)

2

[أسئلة الامتحان النهائي الالكتروني بريدج](#)

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مؤسسة الإمارات للتعليم المدرسي  
مدرسة الحصن للتعليم الثانوي  
مراجعة

أسئلة الهيكل

المادة: رياضيات

الصف العاشر العام

الفصل الدراسي الثالث 2023/2022

أبنائي الطلاب ....

العلم هو الوسيلة الوحيدة التي يرتفع به شأن الانسان إلى مراتب الكرامة والشرف....

اعداد

ا. مصطفى عبد العزيز

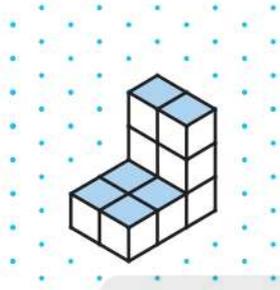
مدرسة الحصن الثانوية

## Part 1

### 1. Draw isometric views of three-dimensional figures

Draw the top, left, front, and right view of each solid

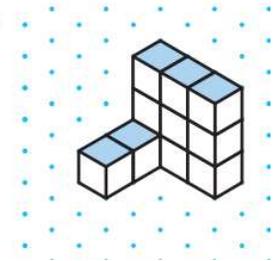
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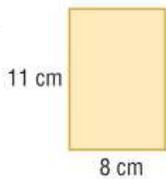
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### 2. Perimeter and area of two-dimensional geometric shapes

Find the perimeter or circumference and area of each figure. Round to the nearest tenth.

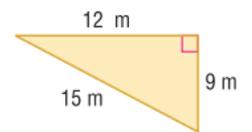
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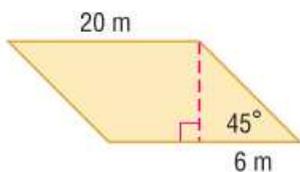
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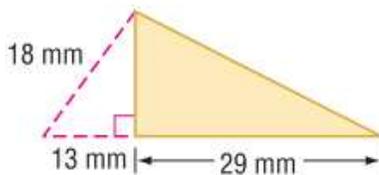
### 3. Perimeter and area of two-dimensional geometric shapes

Find the perimeter and area of each parallelogram, triangle, or composite figure. Round to the nearest tenth.

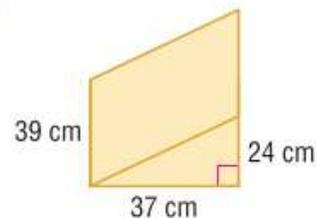
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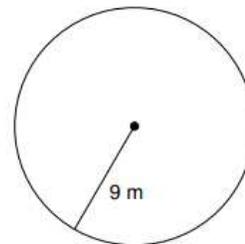
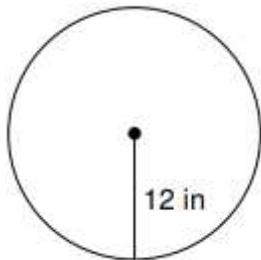
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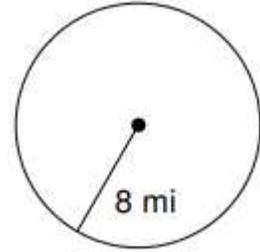
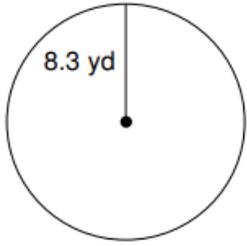
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### 4. Area and circumference of a circle

● Find the area of each. Use your calculator's value of  $\pi$ . Round your answer to the nearest tenth.

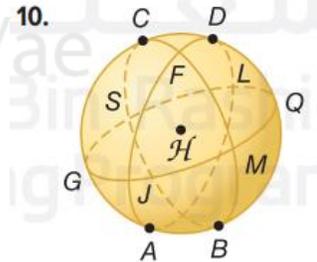
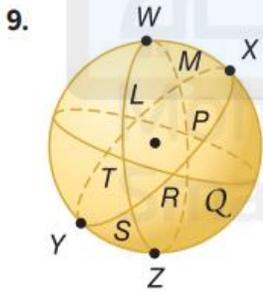


● Find the circumference of each circle. Use your calculator's value of  $\pi$ . Round your answer to the nearest tenth.



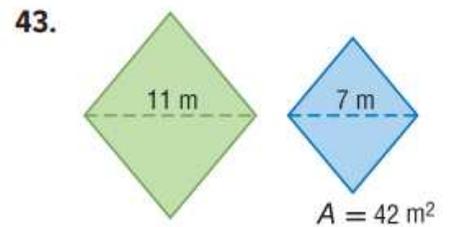
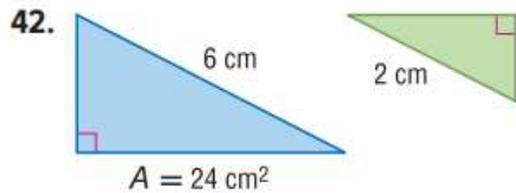
5. Describe sets of points on a sphere

Name two lines containing point M, a segment containing point S, and a triangle in each of the following spheres.



## 5. Use properties of similar solids

For each pair of similar figures, find the area of the green figure.



## 6. Simplify expressions.

Simplify

1.  $\frac{1}{2} + \frac{3}{8}$

2.  $\frac{7}{9} + \frac{2}{6}$

3.  $\frac{2}{5} + \frac{7}{8}$

5.  $\frac{3}{7} \cdot \frac{21}{24}$

4.  $\frac{2}{9} \cdot \frac{4}{8}$

6.  $\frac{3}{10} \cdot \frac{2}{9}$

7. A football team brings a 36-liter cooler of water to their games. How many 250-milliliter cups can the team drink per game?

## 7. Probabilities of simple events

A die is rolled. Find the probability of each outcome.

8.  $P(\text{greater than } 1) =$

9.  $P(\text{odd}) =$

10.  $P(\text{less than } 2) =$

11.  $P(1 \text{ or } 6) =$

12. Two friends are playing a game with a 20-sided die that has all of the letters of the alphabet except for Q, U, V, X, Y, and Z. What is the probability that the die will land on a vowel?

## 9. Use the Fundamental Counting Principle to count outcomes

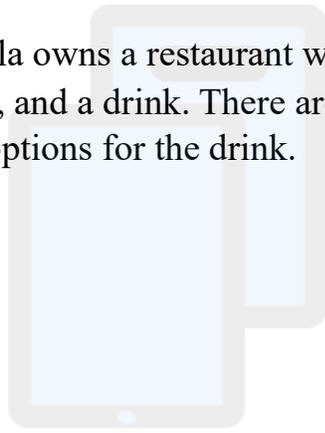
Find the number of possible outcomes for each situation.

15. In the Junior Student Council elections, there are 3 people running for secretary, 4 people running for treasurer, 5 people running for vice president, and 2 people running for class president.

16. When signing up for classes during his first semester of college, Frederica has 4 class spots to fill with a choice of 4 literature classes, 2 math classes, 6 history classes, and 3 film classes.

17. Huda is choosing one each of 6 colleges, 5 majors, 2 minors, and 4 clubs.

18. Hala owns a restaurant where all-in lunch menu has 4 items: a starter, a main course, a dessert, and a drink. There are 5 options for the starter, 4 for the main course, 3 for the dessert, and 6 options for the drink.



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## 10. Use permutations with probability

### (Example 2)

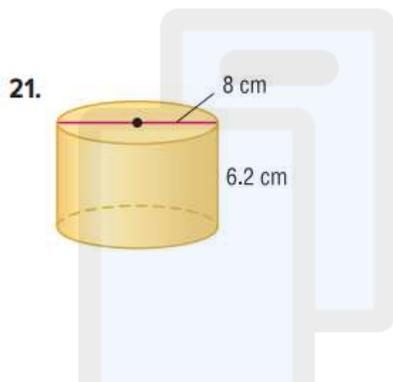
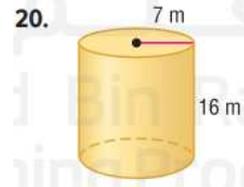
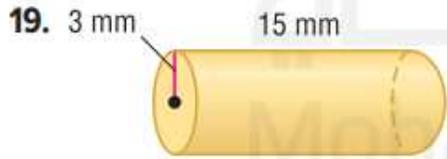
A class is divided into teams each made up of 15 students. Each team is directed to select team members to be officers. If Adnan, Obaid, Abdalla are on a team, and the positions are decided at random, what is the probability that they are selected as president, vice president, and secretary, respectively?

صف دراسي مقسم إلى فرق. كل فريق يضم 15 طالبا. وكل فريق يُوجه لاختيار أعضاء الفريق ليكونوا مسؤولين. إذا كان عدنان وعبيد وعبد الله أعضاء في فريق، ويتم تقرير المناصب بشكل عشوائي. فما احتمال اختيارهم ليتقلدوا مناصب الرئيس ونائب الرئيس والسكرتير على الترتيب.

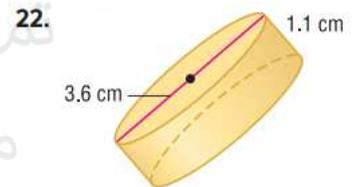
## Part 2

### 11. Expand the study of lateral areas and surface areas of cylinder

Find the lateral area and surface area of each cylinder. Round to the nearest tenth

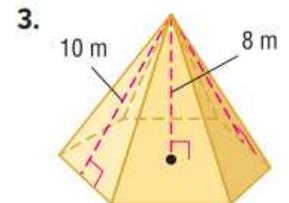
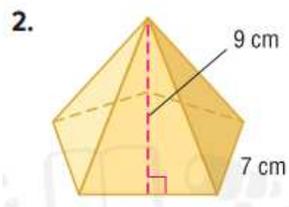
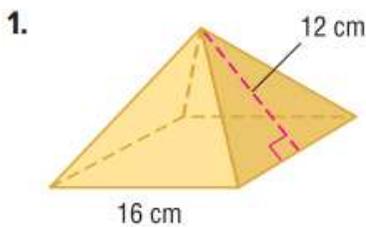


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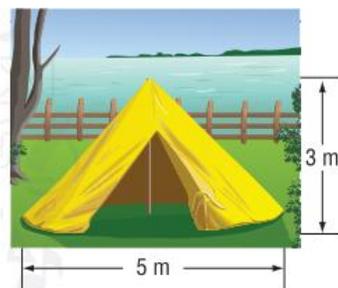
### 12. Expand the study of lateral areas and surface areas of pyramids

Find the lateral area and surface of each regular pyramid. Round to the nearest tenth if necessary.



4. A conical tent is shown at the right. Round answers to the nearest tenth.

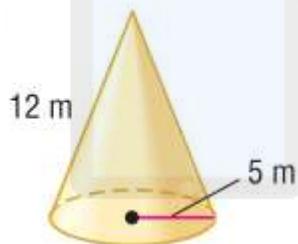
a. find the lateral area of the tent and describe what it represents.



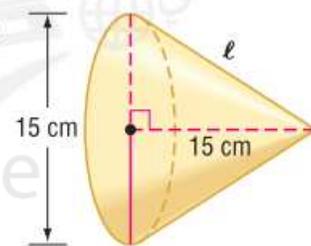
b. find the surface area of the tent and describe what it represents.

● Find the lateral area and surface area of each cone. Round to the nearest tenth.

5.



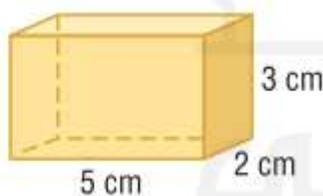
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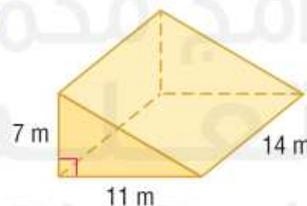
### 13. Expand the study of volumes of prisms.

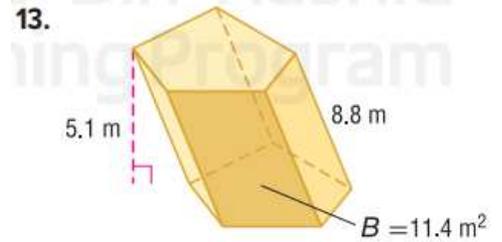
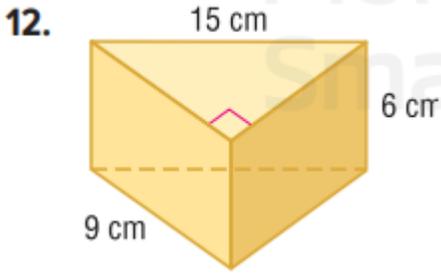
Find the volume of each prism.

10.



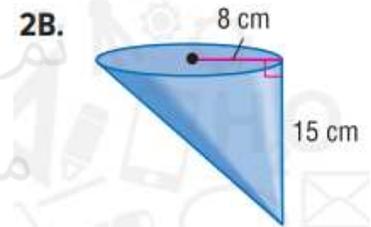
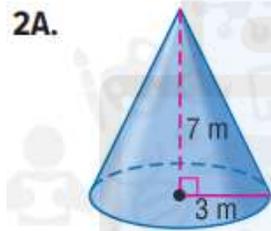
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14. Expand the study of volumes of cones.

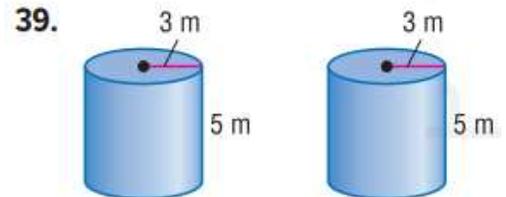
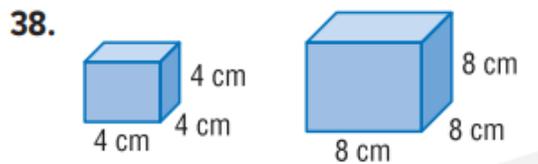
Find the volume.



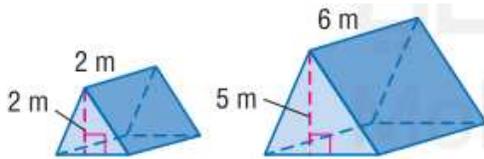
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15. Use properties of similar solids

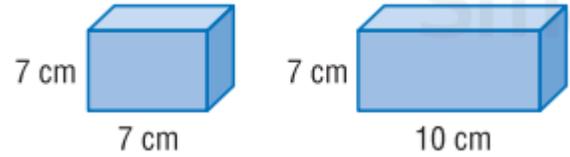
Determine whether each pair of solids is similar, congruent, or neither.  
If the solids are similar, state the scale factor.



40.



41.



16. Find probabilities of events given the occurrence of other events and solve related problems.

1. A red marble is selected at random from a bag of 2 blue and 9 red marbles and not replaced. What is the probability that a second marble selected will be red?

2. A number cube is rolled, and the result is a number greater than 2. What is the probability that the result is a 6?

3. A quadrilateral has a perimeter of 12 and all of the side lengths are odd integers. What is the probability that the quadrilateral is a rhomus?

**4.** A spinner has 12 equally sized sections numbered 1 through 12. Find the probability that the spinner lands on 11, given that the spinner lands on an odd number.

**5.** The probability that a student takes geometry and French at Satomi's school is 0.064. The probability that a student takes French is 0.45.

What is the probability that a student takes geometry if the student takes French?

### 17. Use permutations with probability.

**13. DINING** Three boys and three girls go out to eat together. The restaurant only has round tables. Fred does not want any girl next to him and Gena does not want any boy next to her. How many arrangements are possible?

**14. DANCE** The dance committee consisted of 10 students. The committee will select three officers at random. What is the probability that Majed, Fahd, and Falah are selected?

**15. COMPETITION** From 32 students, 4 are to be randomly chosen for an academic challenge team. In how many ways can this be done?

## 18. Use combinations with probability.

Represent the sample space for each experiment by making an organized list, a table, and a tree diagram.

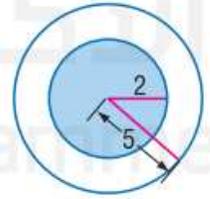
5. A box has 1 red ball, 1 green ball, and 1 blue ball. Two balls are drawn from the box one after the other, without replacement.

6. Shinsaku wants to sponsor a pet and goes to his local humane society to find a hamster or cat. While he is there, he decides to adopt two pets.

7. An engineer is analyzing three factors that affect the quality of semiconductors: temperature, humidity, and material selectins. There are 6 possible temperature setting, 4 possible humidity settings, and 6 choices of materials. How many combinations of settings are there?

8. how many distinguishable ways are there to arrange the letters in the word “bubble”?

9. Abdelkarim is shooting a paintball gun at the target. What is the probability that he will shoot the shaded region?



10. What is the probability that a phone number using the numbers 7,7,7,2,2,2, and will be 662-2777?

11. Fifteen people entered the drawing at the right. What is the probability that Abdulaziz, Abdulrahim, and Abdulrahman all won the tickets?



### 19. Use permutations with probability.

9. A bag contains 3 red chips, 5 green chips, 2 yellow chips, 4 brown chips, and 6 purple chips. One chip is chosen at random, the color noted, and the chips returned to the bag.

- suppose two trails of his experiment are conducted. Are the events independent or dependent?
- What is the probability that both chips are purple?
- What is the probability that the first chip is green and the second is brown?

## 20. Use the Fundamental Theorem of Calculus

Determine the probability of each event.

16. rolling a pair of dice and not getting a 3.

17. drawing a card from a standard deck and not getting a diamond.

18. flipping a coin and not landing on heads.

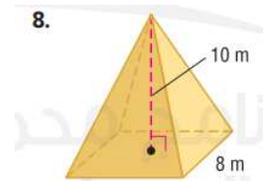
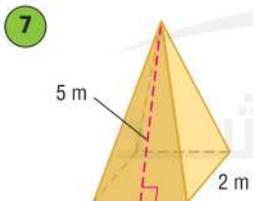
19. spinning a spinner numbered 1-8 and not landing on 5.

20. Mansour bought 20 books. If a total of 500 books were sold, what is the probability that Mansour will get a damaged book?

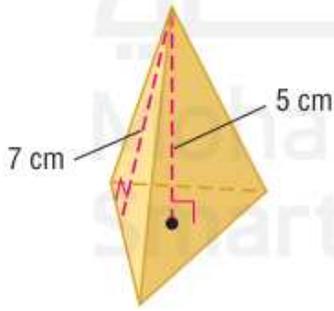
## Part 3

## 21. Expand the study of lateral areas and surface areas of pyramids

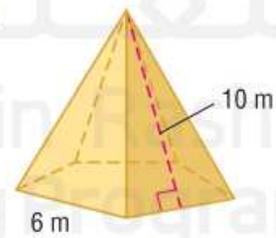
Find the lateral area and surface area of each regular pyramid. Round to the nearest tenth.



9.



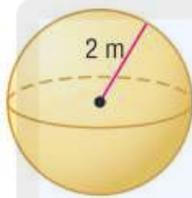
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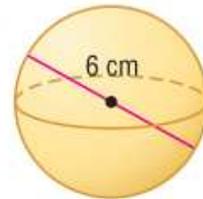
**22. Expand the study of volumes of spheres.**

Find the surface area of each sphere or hemisphere. Round to the nearest tenth.

10.



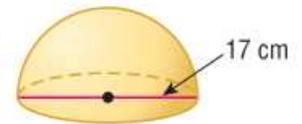
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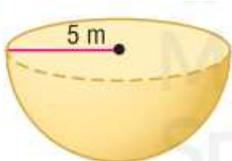


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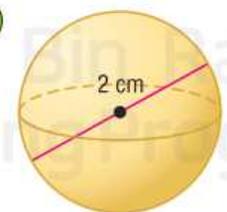


Find the volume of each sphere or hemisphere. Round to the nearest tenth

18.

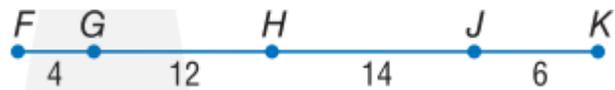


19



## 23. Find probabilities by using length

Point X is chosen at random on  $\overline{FK}$ . Find the probability of each event.



6.  $P(X \text{ is on } \overline{FH})$

7.  $P(X \text{ is on } \overline{GJ})$

8.  $P(X \text{ is on } \overline{HK})$

9.  $P(X \text{ is on } \overline{FG})$

10. Four birds are sitting on a telephone wire. What is the probability that a fifth bird landing at a randomly selected point between birds 1 and 4 will sit at some point between birds 3 and 4?

