

Which of the following sets of side lengths below can make triangles?

GSE.7.G.2

- 1.) 2, 3, 4 2.) 2, 2, 5 3.) 2, 5, 5 4.) 2, 2, 2 5.) 9, 1, 1
yes or no *yes or no* *yes or no* *yes or no* *yes or no*

6.) WRITE A RULE:

Which of the following sets of angles CAN make triangles and which CANNOT make triangles?

GSE.7.G.2

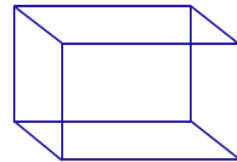
- 7.) 20°, 40°, 30° 8.) 15°, 35°, 130° 9.) 20°, 100°, 60° 10.) 20°, 100°, 50°
can or cannot *can or cannot* *can or cannot* *can or cannot*

11.) WRITE A RULE:

12.) What shape is the new face when a rectangular prism...

GSE.7.G.3

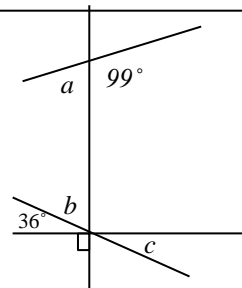
- ...is cut parallel to the base?
- ...is cut perpendicular to the base?
- ...is cut diagonally from top left to bottom right?
- ...has 1 corner cut off?



13.) Find the measure of:

GSE.7.G.5

- Angle *a* _____
 Angle *b* _____
 Angle *c* _____



How many different triangles can you make with...

GSE.7.G.2

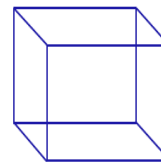
- 14.) ...angles of 40°, 40°, 80° ?
- 15.) ...angles of 80°, 77°, 23° ?
- 16.) ...side lengths of 12, 3, 7?
- 17.) ...side lengths of 44, 20, 35?

ANSWER CHOICES

ONE, it's a unique triangle.
MORE THAN ONE triangle can be made.
NONE, a triangle cannot be made.

For number 18 & 19: The sides of a cube are 8 cm.

- 18.) Find the volume of the cube.
- 19.) Find the surface area of the cube.



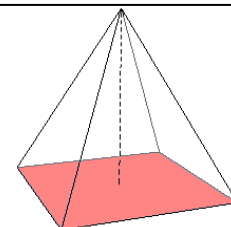
GSE.7.G.3

GSE.7.G.3

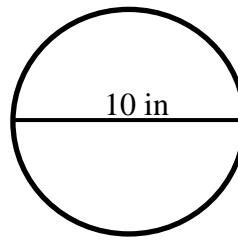
20.) Look at the pyramid. What shape would the new face be if the pyramid was

GSE.7.G.3

- ... cut parallel to the base?
- ... cut through the tip and perpendicular to the base?
- ... cut diagonally, not through the tip?



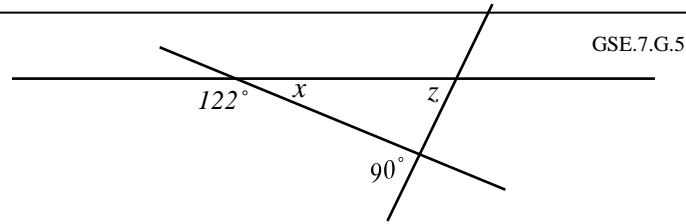
21.) Find the area of the circle.



GSE.7.G.4

22.) Find the circumference of the circle.

Use diagram to answer questions 23 & 24.



GSE.7.G.5

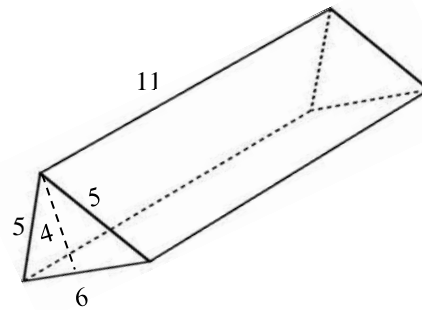
23.) Solve for x .

24.) Solve for z .

Not drawn to scale.

Use the diagram to answer questions 25 & 26.

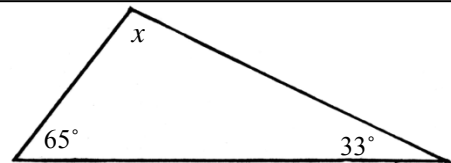
25.) Find the surface area of the prism.



GSE.7.G.6

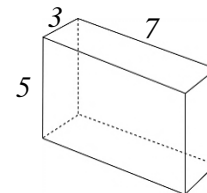
26.) Find the volume of the prism.

27.) Find the missing measure of the angle x .



GSE.7.G.5

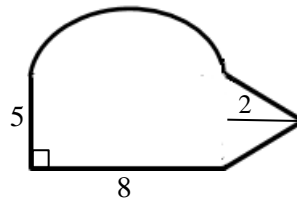
28.) Find surface area of the rectangular prism.



GSE.7.G.6

29.) Find the volume of the rectangular prism.

30.) Find the area of the irregular shape.



GSE.7.G.6

31.) What shape is the new face when a cylinder...

...is cut parallel to the base?

...is cut perpendicular to the base?

...is cut diagonally from top left to bottom right?



GSE.7.G.3