

Worksheet

12/06/2020




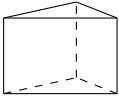
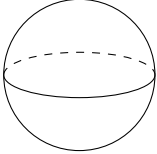

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Problem quickname: 6031

1)

For every shape on the left-hand side, find the correct formula for the mentioned

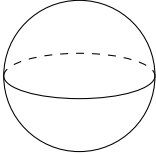

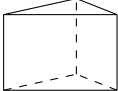


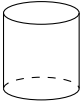
property on the right-hand side.

	Shape		Volume
A	A square pyramid 	1	$V = a^3$
B	A cylinder 	2	$V = \frac{4}{3} \cdot \pi \cdot r^3$
C	A cube 	3	$V = \frac{a^3}{12} \cdot \sqrt{2}$
D	A prism 	4	$V = \pi \cdot r^2 \cdot h$
E	A sphere 	5	$V = \frac{1}{3} \cdot a^2 \cdot h$
F	A regular tetrahedron 	6	$V = A(\text{Grundfläche}) \cdot h$

2)

For every shape on the left-hand side, find the correct formula for the mentioned

property on the right-hand side.

	Shape		Surface area
A	A sphere 	1	$A = a^2 \cdot \sqrt{3}$
B	A regular tetrahedron 	2	$A = 6 \cdot a^2$
C	A prism 	3	$A = 4 \cdot \pi \cdot r^2$
D	A cube 	4	$A = 2 \cdot (a \cdot b + a \cdot c + b \cdot c)$
E	A pyramid 	5	$A = 2 \cdot \pi r^2 + 2 \cdot \pi \cdot r \cdot h$
F	A cylinder 	6	$A = 2 \cdot A(\text{Grundfläche}) + h \cdot (a + b + c)$

3)

For every shape on the left-hand side, find the correct formula for the mentioned

property on the right-hand side.

	Shape		Volume
A	A square pyramid	1	$V = A(\text{Grundfläche}) \cdot h$
B	A cylinder	2	$V = \frac{a^3}{12} \cdot \sqrt{2}$
C	A sphere	3	$V = \frac{1}{3} \cdot a^2 \cdot h$
D	A prism	4	$V = \pi \cdot r^2 \cdot h$
E	A regular tetrahedron	5	$V = a^3$
F	A cube	6	$V = \frac{4}{3} \cdot \pi \cdot r^3$

4)

For every shape on the left-hand side, find the correct formula for the mentioned property on the right-hand side.

	Shape		Surface area
A	A cube	1	$A = 2 \cdot \pi r^2 + 2 \cdot \pi \cdot r \cdot h$
B	A cylinder	2	$A = a^2 + a \cdot \sqrt{4 \cdot h^2 + a^2}$
C	A square pyramid	3	$A = a^2 \cdot \sqrt{3}$
D	A circular cone	4	$A = 6 \cdot a^2$
E	A regular tetrahedron	5	$A = 4 \cdot \pi \cdot r^2$
F	A sphere	6	$A = r \cdot \pi \cdot (r + s)$

Good Luck!