

# Worksheet

04/14/2020


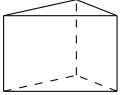



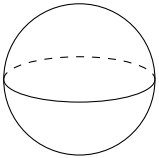
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Problem quickname: 6031

1)

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

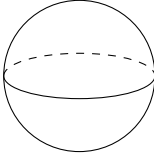

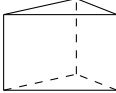



property on the right-hand side.

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

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

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

Good Luck!