

# Worksheet

04/14/2020

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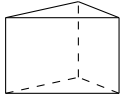


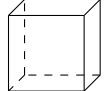
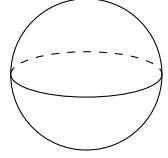
Problem quickname: 6031

1)

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

Quick:  
6031

property on the right-hand side.

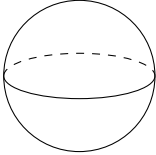

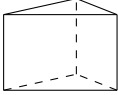

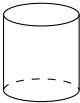
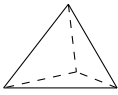
	Shape		Volume
A	A regular tetrahedron 	→ 2	$V = \frac{a^3}{12} \cdot \sqrt{2}$
B	A prism 	→ 5	$V = A(\text{Grundfläche}) \cdot h$
C	A square pyramid 	→ 4	$V = \frac{1}{3} \cdot a^2 \cdot h$
D	A circular cone 	→ 6	$V = \frac{1}{3} \cdot \Pi \cdot r^2 \cdot h$
E	A cube 	→ 3	$V = a^3$
F	A sphere 	→ 1	$V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

2)

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

Quick:  
6031

property on the right-hand side.

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

3)

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

Quick:  
6031

property on the right-hand side.

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

4)

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

Quick:  
6031

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

Good Luck!