

# Worksheet

12/06/2020

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
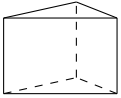
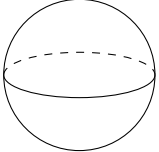

Problem quickname: 6031

1)

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

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property on the right-hand side.

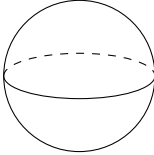

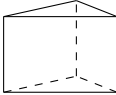


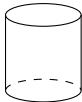
	Shape		Volume
A	A square pyramid 	→ 5	$V = \frac{1}{3} \cdot a^2 \cdot h$
B	A cylinder 	→ 4	$V = \pi \cdot r^2 \cdot h$
C	A cube 	→ 1	$V = a^3$
D	A prism 	→ 6	$V = A(\text{Grundfläche}) \cdot h$
E	A sphere 	→ 2	$V = \frac{4}{3} \cdot \pi \cdot r^3$
F	A regular tetrahedron 	→ 3	$V = \frac{a^3}{12} \cdot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

2)

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

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property on the right-hand side.

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

3)

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

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property on the right-hand side.

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

4)

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

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

Good Luck!