

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.

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

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.

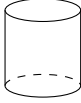


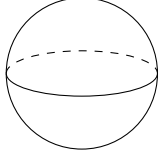


Shape		Surface area	
A	A prism	→ 3	$A = 2 \cdot A(\text{Grundfläche}) + h \cdot (a + b + c)$
B	A cube	→ 6	$A = 6 \cdot a^2$
C	A square pyramid	→ 5	$A = a^2 + a \cdot \sqrt{4 \cdot h^2 + a^2}$
D	A cylinder	→ 1	$A = 2 \cdot \Pi r^2 + 2 \cdot \Pi \cdot r \cdot h$
E	A pyramid	→ 2	$A = 2 \cdot (a \cdot b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

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.

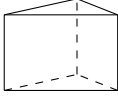
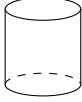




	Shape		Surface area
A		→ 3	$A = 2 \cdot \Pi r^2 + 2 \cdot \Pi \cdot r \cdot h$
B		→ 6	$A = 6 \cdot a^2$
C		→ 5	$A = a^2 + a \cdot \sqrt{4 \cdot h^2 + a^2}$
D		→ 2	$A = 4 \cdot \Pi \cdot r^2$
E		→ 4	$A = 2 \cdot (a \cdot b + a \cdot c + b \cdot c)$
F		→ 1	$A = r \cdot \Pi \cdot (r + s)$

4)

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		→	4 $V = A(\text{Grundfläche}) \cdot h$
B		→	3 $V = \Pi \cdot r^2 \cdot h$
C		→	6 $V = \frac{a^3}{12} \cdot \sqrt{2}$
D		→	2 $V = \frac{1}{3} \cdot a^2 \cdot h$
E		→	1 $V = \frac{1}{3} \cdot \Pi \cdot r^2 \cdot h$
F		→	5 $V = a^3$

Good Luck!