

Powers of Monomials

Simplify

① $(5^2)^6$

② $(2x^3m^4)^3$

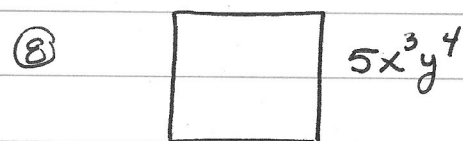
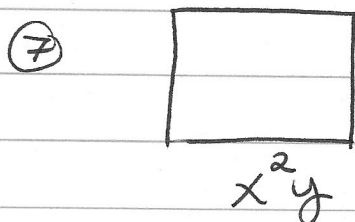
③ $(3^2x^4y^3)^2$

④ $(-4m^4p^6)^3$

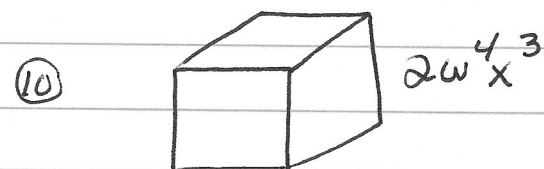
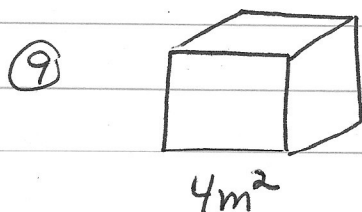
⑤ $([x^3]^2)^4$

⑥ $(3x)^2 \cdot (x^3y)^3$

Find the area of each square



Find the volume of each cube.



Answers:

① $5^{12} = 244,140,625$

② $8x^9m^{12}$

③ $81x^8y^6$

④ $-64m^{12}p^{18}$

⑤ x^{24}

⑥ $9x^4y^3$

⑦ x^4y^2

⑧ $25x^6y^8$

⑨ $64m^6$

⑩ $8w^{12}x^9$