

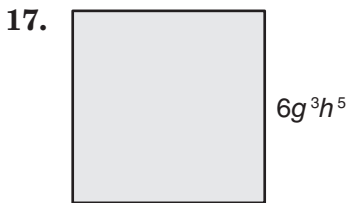
Lesson 4 Skills Practice

Powers of Monomials

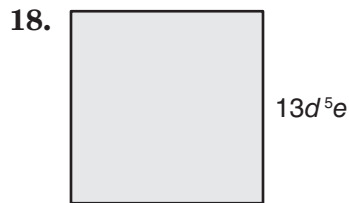
Simplify.

- | | | | |
|--|--|--|--|
| 1. $(7^2)^3$
7^6 or 117,649 | 2. $(3^2)^6$
3^{12} or 531,441 | 3. $(8^3)^2$
8^6 or 262,144 | 4. $(9^4)^2$
9^8 or 43,046,721 |
| 5. $(d^7)^6$
d^{42} | 6. $(m^5)^5$
m^{25} | 7. $(h^6)^3$
h^{18} | 8. $(z^7)^3$
z^{21} |
| 9. $[(4^3)^2]^2$
4^{12} or 16,777,216 | 10. $(-5a^2b^7)^7$
$-78,125a^{14}b^{49}$ | 11. $(2m^5g^{11})^6$
$64m^{30}g^{66}$ | 12. $[(2^3)^3]^2$
2^{18} or 262,144 |
| 13. $(7a^5b^6)^4$
$2,401a^{20}b^{24}$ | 14. $(7m^3n^{11})^5$
$16,807m^{15}n^{55}$ | 15. $(-3w^3z^8)^5$
$-243w^{15}z^{40}$ | 16. $(-7r^4s^{10})^4$
$2,401r^{16}s^{40}$ |

GEOMETRY Express the area of each square below as a monomial.

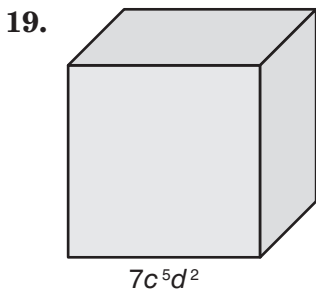


$36g^6h^{10}$

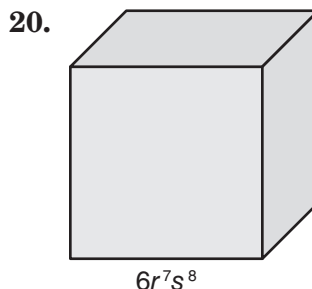


$169d^{10}e^2$

GEOMETRY Express the volume of each cube below as a monomial.



$343c^{15}d^6$



$216r^{21}s^{24}$