

Chapter Test B

For use after Chapter 8

Simplify the expression, if possible. Write your answer as a power.

1. $6^7 \cdot 6^9$

2. $(x^5)^6$

3. $(-2x)^4$

4. $3x^2 \cdot (4x^3)^2$

Simplify. Then evaluate the expression when $a = 1$ and $b = 2$.

5. $(a^2b^2)^3$

6. $a^2 \cdot (a^3b^2)^4$

Complete the statement using $<$ or $>$.

7. $(8^3 \cdot 8^5) \underline{\quad} 8^{15}$

8. $3^4 \cdot 3^5 \underline{\quad} 3^{20}$

Evaluate the expression. Write your answer as a fraction in simplest form.

9. $2(2^{-5})$

10. $(\frac{1}{4})^{-2}$

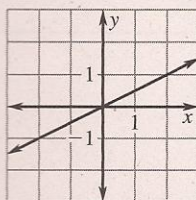
Rewrite the expression with positive exponents.

11. $x^{-4}y^3$

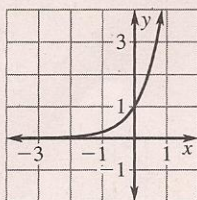
12. $\frac{1}{2x^{-2}y^{-3}}$

Match the equation with its graph.

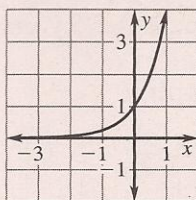
A.



B.



C.



13. $y = 4^x$

14. $y = \frac{1}{2}x$

15. $y = 5^x$

Evaluate the expression. Write your answer as a fraction in simplest form.

16. $\frac{4^5 \cdot 4^3}{4^2}$

17. $(\frac{7}{8})^2$

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____