

1. Evaluate the expression. $(\frac{1}{3})^{-1} + (\frac{1}{4})^{-1}$

A. 7

B. -7

C. $-\frac{1}{7}$

D. $-\frac{12}{7}$

E. $\frac{1}{7}$

F. $\frac{12}{7}$

G. $\frac{7}{12}$

H. $-\frac{7}{12}$

2. Simplify the expression. $(\frac{u^4r^{-6}}{u^2r^6})^{-7}$

A. $u^{-30}r^{20}$

B. $u^{-7}r^{-24}$

C. $u^{-14}r^{84}$

D. ur^{-31}

E. $u^{-29}r^8$

F. $u^{15}r^{-10}$

G. r^{-9}

H. $u^{-12}r^3$

3. Simplify the expression. $(\xi^8 \cdot \alpha^5)^{-2}(\xi^{-4} \cdot \alpha^{-5})^6$

A. $\xi^2\alpha^{12}$

B. $\xi^8\alpha^{-27}$

C. $\xi^{-11}\alpha^{-3}$

D. $\xi^{-56}\alpha^{-33}$

E. $\xi^{-40}\alpha^{-40}$

F. $\xi^{16}\alpha^{-16}$

G. $\xi^{-42}\alpha^{-56}$

H. $\xi^{17}\alpha^9$

4. Simplify and rewrite the expression without negative exponents. $\frac{\xi}{p^{-3}}$

A. $\frac{1}{\xi p^3}$

B. $-\frac{1}{p\xi^3}$

C. ξp^3

D. $-\xi p^3$

E. $-\frac{1}{\xi p^3}$

F. $p\xi^3$

G. $\frac{1}{p\xi^3}$

H. $-p\xi^3$

5. Simplify the expression. $(\beta^5 \cdot r^{20})^{-13}$

A. $\beta^{-2}r^{13}$

B. $\beta^{-4}r^{11}$

C. $\beta^{77}r^{272}$

D. $\beta^{-71}r^{-266}$

E. $\beta^{-9}r^{-24}$

F. $\beta^{-7}r^{-22}$

G. $\beta^{51}r^{246}$

H. $\beta^{-65}r^{-260}$

6. Evaluate the expression. $6^{-1} + 5^{-1}$

A. -11

B. $-\frac{30}{11}$

C. 11

D. $-\frac{1}{11}$

E. $\frac{1}{11}$

F. $\frac{11}{30}$

G. $\frac{30}{11}$

H. $-\frac{11}{30}$

7. Simplify the expression. $5b^{20} \cdot 3b^{19}$

A. $15b^{37}$

B. $15b^{39}$

C. $15b^{41}$

D. $8b^2$

E. $15b^{36}$

F. 8

G. $8b^1$

H. $8b^{-3}$

8. Simplify the expression by writing it without negative exponents. $\left(\frac{\beta}{t}\right)^{-2}$

A. $\frac{1}{\beta^2 t^2}$

B. $-\frac{\beta^2}{t^2}$

C. $\frac{t^2}{\beta^2}$

D. $t^2 \beta^2$

E. $\frac{\beta^2}{t^2}$

F. $-\frac{t^2}{\beta^2}$

G. $-t^2 \beta^2$

H. $-\frac{1}{\beta^2 t^2}$