

1. Name the **additive inverse** and the **multiplicative inverse** of the following numbers and/or variables.

<u>Given number and/or variable</u>	<u>additive inverse (opposite)</u>	<u>multiplicative inverse (reciprocal)</u>
A. 6	_____	_____
B. $3\frac{2}{5}$	_____	_____
C. $5x$	_____	_____
D. $-7$	_____	_____
E. $-\frac{8}{5}$	_____	_____
F. $-4abc$	_____	_____
G. 0	_____	_____
H. $-1$	_____	_____

Simplify.

I. $-4\sqrt{294}$	J. $\sqrt{318}$	K. $\frac{\sqrt{900}}{\sqrt{20}}$	L. $3\sqrt{50} \times 3\sqrt{8}$
M. $\sqrt{288}$	N. $\sqrt{85} \times \sqrt{5}$	O. $\sqrt{49}$	P. $3\sqrt{8} + 2\sqrt{2}$

Simplify by rationalizing the denominator.

Q. $\frac{2}{\sqrt{3}}$ _____	R. $\frac{3\sqrt{27}}{2\sqrt{6}}$ _____	S. $-\frac{18}{\sqrt{6}}$ _____
-------------------------------	---	---------------------------------

Simplify.

T. $2^{-1}$	U. $\frac{3^{-2}}{5}$	V. $\frac{2}{4^{-3}}$	W. $\frac{0}{1^{-3}}$
X. $\frac{5}{3A^{-3}B^{-1}C}$	Y. $\frac{5}{100^{-1}R^3}$	Z. $\frac{27x^{-3}y^{-1}}{9^{-2}y^3}$	