Bellwork Algebra 2A Tuesday, September 13, 2016

1. Factor. $9c^4 - 48c^2 - 36$

For each expression do the following:

a. Evaluate each for $G = 8$ $H = -16$ $K = -4$. Round to the nearest hundredth as needed.

b. List the subset(s) of Real Numbers to which each answer belongs.

2. $-H^2 - KG^3$

3. $\dfrac{\sqrt{K^2 + G}}{-G + K - H}$

4. Find the reciprocal of each number.

a. -1.375

b. $9\frac{4}{7}$

Bellwork Algebra 2A Tuesday, September 13, 2016 Answers

1. Factor. $9c^4 - 48c^2 - 36 = 3(3c^4 - 16c^2 - 12)$

$= 3(3c^2+2)(c^2-6)$

$-36 \times 2 = -72$, $-72 + (-16) = -18$

	$3c^2$	$+2$
c^2	$3c^4$	$2c^2$
-6	$-18c^2$	-12

For each expression do the following:

a. Evaluate each for $G = 8$ $H = -16$ $K = -4$. Round to the nearest hundredth as needed.

b. List the subset(s) of Real Numbers to which each answer belongs.

2. $-H^2 - KG^3$

$= -(-16)^2 - (-4)(8)^3$

$= -256 + 4(512)$

$= -256 + 2048 = 1792$

Natural, Whole, Integer, Rational

3. $\dfrac{\sqrt{K^2 + G}}{-G + K - H} = \dfrac{\sqrt{(-4)^2 + 8}}{-(8) + -4 - (-16)} = \dfrac{\sqrt{24}}{4}$

$= 1.22$ IRRATIONAL

4. Find the reciprocal of each number.

a. $-1.375 = -\dfrac{1375}{1000}$

Reciprocal: $-\dfrac{1000}{1375}$

b. $9\frac{4}{7} = \frac{67}{7}$

Reciprocal $\longrightarrow \dfrac{7}{67}$