

Name Key

Date _____

Algebra: Unit 1 Quiz 2: Evaluating Expressions, Operations with Real Numbers, Matrices

Evaluate each expression. Show your work.

1) $y^2 \div z$ for $y = -14$ and $z = 4$

$$\begin{aligned} & (-14)^2 \div 4 \\ & = \frac{196}{4} = \end{aligned}$$

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2) $\frac{a}{b}$ for $a = \frac{3}{4}$ and $b = \frac{7}{8}$

$$\frac{3}{4} \div \frac{7}{8} = \frac{3}{4} \times \frac{8}{7} = \frac{24}{28} = \frac{6}{7}$$

$\frac{6}{7}$

3) $\frac{4+2d}{-2}$ for $d = -7$

$$\frac{4+2(-7)}{-2} = \frac{4-14}{-2} = \frac{-10}{-2} = 5$$

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Classify the following numbers in as many sets as they belong (real, rational, irrational, integer, whole, natural).

4) $0.666666\dots$ real, rational

5) π real, irrational

6) $\sqrt{81}$ real, rational, integer, whole, natural

7) Put in order from least to greatest: $-0.25, -\frac{3}{4}, -1$ $-1, -\frac{3}{4}, -0.25$