**ANSWERS**

**Multiple choices**

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| **1.** | **Which of the following numbers is rational?** |
|  | **a.)** $-2.121212121$ | **b.)** $-0.256345………$ |
|  | **c.)** $\sqrt{7}$ | **d.)** $2.123212528$ |

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| **2.** | **Which of the following numbers is irrational?** |
|  | **a.)** $3\frac{7}{13}$ | **b.)** $4.2346745…….$ |
|  | **c.)** $\sqrt{529}$ | **d.)** $\frac{5}{125}$ |

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| **3.** | **Which of the following numbers is a terminating decimal?** |
|  | **a.)** $\frac{6}{16}$ | **b.)** $\frac{12}{13}$ |
|  | **c.)** $ 2.\overbar{21}$ | **d.)** $0.2\overbar{3}$ |

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| **4.**  | **Classify each number below as either rational or irrational.** **If you believe your number is rational, prove your answer by writing it as a fraction.** |
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| **Number** | **Rational/Irrational** | **Fraction** |
| $$0.\overbar{23}$$ | **Rational** | $$\frac{23}{99}$$ |
| $$0.34$$ | **Rational** | $$\frac{17}{50}$$ |
| $$-4.\overbar{3}$$ | **Rational** | $$-4\frac{1}{3}$$ |
| $$-\sqrt{42}$$ | **Irrational** | $$∕$$ |
| $$0.34129145..$$ | **Irrational** | $$∕$$ |

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| **5.**  | **Find the value of each square root and then classify.**  |
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| **Number** | **Value** | **Perfect square** | **Irrational Number** |
| $$\sqrt{64}$$ | $$8$$ |  |  |
| $$\sqrt{24}$$ | $$4.8989794..$$ |  |  |
| $$\sqrt{81}$$ | $$9$$ |  |  |
| $$-\sqrt{\frac{5}{6}}$$ | $$-0.912870$$ |  |  |
| $$\sqrt{50,625}$$ | $$225$$ |  |  |

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