**Determine whether each decimal is rational or irrational number.**

|  |  |  |  |
| --- | --- | --- | --- |
| **1.** |  | **2.** |  |
|  |  |  |  |
| **3.** |  | **4.** |  |
|  |  |  |  |
| **5.** |  | **6.** |  |
|  |  |  |  |
| **7.** |  | **8.** |  |
|  |  |  |  |

**Convert each fraction to a decimal, then determine if it is a rational or an irrational number.**

|  |  |  |  |
| --- | --- | --- | --- |
| **9.** |  | **10.** |  |
|  |  |  |  |
| **11.** |  | **12.** |  |
|  |  |  |  |

**Determine whether each square root is rational or irrational number.**

|  |  |  |  |
| --- | --- | --- | --- |
| **13.** |  | **14.** |  |
|  |  |  |  |
| **15.** |  | **16.** |  |
|  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **17.** |  | **18.** |  |
|  |  |  |  |
| **19.** |  | **20.** |  |
|  |  |  |  |

**ANSWERS**

**Determine whether each decimal is rational or irrational number.**

|  |  |  |  |
| --- | --- | --- | --- |
| **1.** |  | **2.** |  |
|  | **Irrational number** |  | **Rational number** |
| **3.** |  | **4.** |  |
|  | **Rational number** |  | **Irrational number** |
| **5.** |  | **6.** |  |
|  | **Rational number** |  | **Irrational number** |
| **7.** |  | **8.** |  |
|  | **Irrational number** |  | **Irrational number** |

**Convert each fraction to a decimal, then determine if it is a rational or an irrational number.**

|  |  |  |  |
| --- | --- | --- | --- |
| **9.** |  | **10.** |  |
|  | **A terminating decimal**  **Rational number** |  | **A repeating decimal**  **Rational number** |
| **11.** |  | **12.** |  |
|  | **A repeating decimal**  **Rational number** |  | **Irrational number** |

**Determine whether each square root is rational or irrational.**

|  |  |  |  |
| --- | --- | --- | --- |
| **13.** |  | **14.** |  |
|  | **This number is rational.** |  | **This number is irrational.** |
| **15.** |  | **16.** |  |
|  | **This number is irrrational.** |  | **This number is rational.** |

|  |  |  |  |
| --- | --- | --- | --- |
| **17.** |  | **18.** |  |
|  | **This number is rational.** |  | **This number is irrational.** |
| **19.** |  | **20.** |  |
|  | **This number is irrational.** |  | **This number is rational.** |