

Chapter 3 Practice test

$$\frac{7}{20} \cdot \frac{5}{5} = \frac{35}{100}$$

1. A survey shows that about $\frac{7}{20}$ of the families in the United States eat dinner together every night. Write $\frac{7}{20}$ as a decimal.

1. 0.35

2. Write $-\frac{5}{12}$ as a decimal. Use a bar to show a repeating decimal.

2. -0.41 $\bar{6}$

3. Identify all sets of numbers to which 2.1711711171117.... belong.

IRRATIONAL NUMBER
3. REAL NUMBER

4. Replace \bullet with $<$, $>$, or $=$ to make the following statement true.

$$-\frac{4}{5} \bullet 0.\bar{8}$$

$$-\frac{4}{5} < 0.\bar{8}$$

4. <

5. One inch is equivalent to 2.54 centimeters. Write this value as a mixed number in simplest form.

$$2\frac{54}{100}$$

5. $2\frac{27}{50}$

6. Max typically drinks $3\frac{3}{4}$ cups of milk each day. Today he drank triple his usual amount. How much milk did Max drink today?

6. $11\frac{1}{4}$ cups

$$A = \frac{5}{1} \cdot \frac{41}{9} = \frac{205}{9} = 22\frac{7}{9} = 22.\bar{7} \text{ ft}^2$$

7. Find the area and the perimeter of a rectangle with a length of 5 feet and a width of $4\frac{5}{9}$ feet. Write each answer as a fraction and as a decimal. Use bar notation if necessary.

$$P = 5(2) = 10 \quad \frac{41}{9} + \frac{41}{9} = \frac{82}{9} = 9\frac{1}{9} \quad 9\frac{1}{9} + 10 = 19\frac{1}{9} = 19.\bar{1} \text{ ft}$$

8. Usually LeRoy practices the bass for $2\frac{4}{5}$ hours a day. Today he practiced half his usual time. For how long did he practice?

$$\frac{14}{5} \div \frac{2}{1} = \frac{14}{5} \cdot \frac{1}{2} = \frac{14}{10} = 1\frac{4}{10} = 1\frac{2}{5} \text{ HRS}$$

9. What is the product of $-11\frac{7}{11} \cdot (-12\frac{3}{8})$ in simplest form?

$$11\frac{7}{11} = \frac{128}{11} \cdot \frac{8}{8} = \frac{1024}{88}$$

$$\frac{1024 \cdot 1089}{88} = \frac{1,115,136}{88} = 12,558$$

$$\sqrt{4} = 2$$

$$12\frac{3}{8} = \frac{99}{8} \cdot \frac{11}{11} = \frac{1089}{88}$$

$$\sqrt{5} = 2. \dots \text{DOES NOT REPEAT}$$

$$x^2 = -1$$

$$x^2 = -9$$

$\pi \leftarrow$ IRRATIONAL

$\sqrt{-1} \leftarrow$ IMAGINARY