

TASK 2: Unit Test Review Rational Numbers (Chapter 3) Name: _____

Multiple Choice: Identify the choice that best completes the statement or answers the question.

_____ 1. Which numbers are rational numbers?

$$-5.4, \frac{7}{6}, 11, -\frac{1}{4}$$

a. $\frac{7}{6}$

c. All of them

b. $-5.4, \frac{7}{6},$ and $-\frac{1}{4}$

d. $\frac{7}{6}$ and 11

_____ 2. Identify equal rational numbers in this list:

$$\frac{-3}{-4}, \frac{-3}{4}, -\frac{4}{3}, \frac{3}{-4}, -\frac{3}{4}$$

a. $-\frac{4}{3}$ and $\frac{3}{-4}$

c. $\frac{-3}{4}, -\frac{4}{3},$ and $-\frac{3}{4}$

b. $\frac{-3}{4}, \frac{3}{-4},$ and $-\frac{3}{4}$

d. $\frac{-3}{-4}$ and $-\frac{4}{3}$

_____ 3. Which of these numbers are between $\frac{4}{6}$ and $\frac{7}{5}$?

$$\frac{5}{6}, \frac{1}{5}, \frac{7}{8}, \frac{4}{5}$$

a. $\frac{5}{6}$ and $\frac{7}{8}$

b. $\frac{5}{6}, \frac{7}{8},$ and $\frac{4}{5}$

c. $\frac{1}{5}$ and $\frac{7}{8}$

d. $\frac{5}{6}$ and $\frac{4}{5}$

_____ 4. Estimate to determine which sum is greater than 0.

i) $5.8 + (-7.7)$

ii) $-1.1 + (-1.8)$

iii) $-3.3 + 3.6$

iv) $-3.6 + 2.8$

a. i

b. ii

c. iv

d. iii

_____ 5. Which expression has the same sum as $-\frac{5}{6} + \frac{11}{12}$?

i) $-\frac{11}{12} + \left(-\frac{5}{6}\right)$

ii) $\frac{11}{12} + \left(-\frac{5}{6}\right)$

iii) $\frac{5}{6} + \left(-\frac{11}{12}\right)$

iv) $\frac{11}{12} + \frac{5}{6}$

a. i

b. iv

c. iii

d. ii

_____ 6. Which expressions have the same answer as $-12.3 - (-7.8)$?

i) $7.8 - 12.3$

ii) $7.8 + 12.3$

iii) $-12.3 + 7.8$

iv) $-7.8 - 12.3$

a. i and iii

b. ii and iv

c. ii and iii

d. iii and iv

_____ 7. Determine this difference.

$$8.54 - (-3.76)$$

a. -32.11

b. 4.78

c. 11.30

d. 12.30

_____ 8. Determine this product.

$$\left(-4\frac{1}{3}\right) \times \left(1\frac{4}{5}\right)$$

a. $7\frac{4}{5}$

b. $2\frac{8}{15}$

c. $-2\frac{8}{15}$

d. $-7\frac{4}{5}$

_____ 9. Determine this quotient.

$$\frac{3}{14} \div \left(-\frac{15}{4}\right)$$

a. $-\frac{2}{35}$

b. $-\frac{5}{56}$

c. $-\frac{45}{56}$

d. $-\frac{35}{2}$

Short Answer

10. Order these numbers from greatest to least.

$$-1\frac{1}{7}, 1.2, -1\frac{1}{4}, 1\frac{2}{5}, -1.4$$

11. Determine this sum.

$$-4.1 + 5.6$$

12. Determine this difference.

$$6\frac{1}{2} - \left(-5\frac{1}{3}\right)$$

13. Determine this product.

$$4 \times \left(-\frac{7}{3}\right)$$

14. Which quotients are less than 0?

i) $-2\frac{2}{5} \div 1\frac{7}{8}$

ii) $2\frac{2}{5} \div \left(-\frac{2}{9}\right)$

iii) $-1\frac{7}{8} \div \left(-\frac{2}{9}\right)$

iv) $\frac{2}{9} \div \left(-2\frac{2}{5}\right)$

Problem

15. Marsha has 80 shares in an oil company and 170 shares in a gas company.

On Monday, the value of her oil shares was \$259.20 and the value of her gas shares was \$504.90.

On Friday, the value of her oil shares was \$172.80 and the value of her gas shares was \$217.60.

Determine the change in price of a single share in each company. Show your steps.

16. Classify the following numbers as a natural number, whole number, integer, and/or rational number by placing a in all appropriate boxes

Values	Whole Numbers	Natural Numbers	Integers	Rational Numbers
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$\sqrt{\frac{49}{100}}$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Review Rational Numbers TASK 2

Answer Section

MULTIPLE CHOICE

- 1. ANS: C
- 2. ANS: B
- 3. ANS: B
- 4. ANS: D
- 5. ANS: D
- 6. ANS: A
- 7. ANS: D
- 8. ANS: D
- 9. ANS: A

SHORT ANSWER

- 10. ANS:
 $1\frac{2}{5}, 1.2, -1\frac{1}{7}, -1\frac{1}{4}, -1.4$
- 11. ANS:
 1.5
- 12. ANS:
 $11\frac{5}{6}$
- 13. ANS:
 $\frac{28}{3}$
- 14. ANS:
 i, ii, and iv

PROBLEM

- 15. ANS:
 Oil company:
 Change in value of Marsha’s shares:
 $(\$172.80 - \$259.20) = -\$86.40$
 Change in value per share:
 $(-\$86.40) \div 80 \text{ shares} = -\1.08 per share
 The value of each share went down \$1.08.
- Gas company:
 Change in value of Marsha’s shares:
 $(\$217.60 - \$504.90) = -\$287.30$
 Change in value per share:
 $(-\$287.30) \div 170 \text{ shares} = -\1.69 per share
 The value of each share went down \$1.68.

16. Classify the following numbers as a natural number, whole number, integer, and/or rational number by placing a in all appropriate boxes

Values	Whole Numbers	Natural Numbers	Integers	Rational Numbers
5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
$\sqrt{\frac{49}{100}}$				<input checked="" type="checkbox"/>
0	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>