



# Student Companion

Name: \_\_\_\_\_



**1. In paragraph 1, the author states “When you buy stock, you become a shareholder, which means you now own a "part" of the company.” The term shareholder can best be described as which of the following?**

- a. A shareholder owns part of a company in the hopes of losing money.
- b. A shareholder owns part of a company and if the company profits go up the shareholder earns a part of the profit.
- c. A shareholder is considered a part owner and can make major decisions for that company, regardless of the percentage of shares owned.
- d. A shareholder is considered a part owner but must own at least 10% of the stock to be able to share the profits.

**2. What is the central idea of paragraph 2?**

- a. Technology allows stockholders to make better decisions on how they invest their money.
- b. The stock market has strict guidelines that must be followed, making it difficult for stockholders to make decisions on how they invest their money.
- c. Stockholders have flexibility with their decisions on how they wish to invest their money allowing for a greater chance of earning profits.
- d. Stockholders can earn more profits by investing in more than one company.



**1. Why did American stock exchanges use fractions as opposed to decimals from 1792-2000?**

- a. The real was the Spanish Silver dollar and divided into eight parts.
- b. The stock market could be based on counting with your hands.
- c. The decimal system would not work because of the Spanish dollar.
- d. The U.S. modeled their system off of Spain, mainly because the U.S. dollar's value was based on the value of the Spanish Real which divided into eight parts.

**2. What is the central idea of paragraph 2?**

- a. When using fractions, they have to be translated to match the rest of our decimal based economy.
- b. The Common Cents Stock Pricing Act was signed in 1997.
- c. The decimalization of the stock market simplified how shares and earnings/losses were calculated.
- d. The decimalization of the stock market began in August 2000.

# Rational Numbers

## Practice



### Practice 1

#### Converting Fractions to Decimals

1.  $\frac{2}{9}$

a.  $0.\overline{2}$

b.  $0.\overline{23}$

c. 0.2

d. 0.23

2.  $\frac{8}{11}$

a. 0.73

b.  $0.\overline{72}$

c. 0.7

d.  $0.\overline{7}$

3.  $-\frac{6}{15}$

a. -0.4

b.  $-0.\overline{44}$

c. -0.425

d.  $-0.\overline{42}$

4.  $-\frac{17}{40}$

a. -0.375

b.  $-0.\overline{45}$

c. -0.425

d. -0.4

5.  $\frac{5}{12}$

a. 0.417

b.  $0.\overline{416}$

c.  $0.\overline{42}$

d.  $0.4\overline{16}$



## Practice 2

### Adding and Subtracting Rational Numbers: Decimals

1.  $9.2 - 2.886$

a. 6.486

b. 6.314

c. 7.0

d. 7.314

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2.  $39.76 - 24.796$

a. 14.976

b. 14.964

c. 14.974

d. 16.00

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3.  $x + z$  for  $x = 4.4$  and  $z = 0.72$

a. 10.24

b. 3.68

c. 11.6

d. 5.12

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4.  $x + y - z$  for  $x = 4.1$ ,  $y = 6$ ,  $z = 0.80$

a. 9.3

b. 9.2

c. -2.7

d. 10.9

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5.  $y - x + z$  for  $x = 4.6$ ,  $y = 6$ ,  $z = 0.60$

a. -0.8

b. 2.1

c. 0.8

d. 2

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6.  $70.84 - (-81.42) + 32.336$

a. 184.606

b. 185.596

c. 184.696

d. 184.596

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7.  $3.648 + (-4.113)$

a. -7.761

b. 0.465

c. -7.661

d. -0.465

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8.  $8.46 + (-7.20) - 10.82 - (-18.20)$

a. -27.76

b. 8.64

c. -13.36

d. 28.67

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9.  $17.50 - 17.20 + (-17.85) + 17.50$

a. -0.05

b. 35.65

c. -35.05

d. 5.00

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10.  $25.25 - 26.75 - 25.80 + (-27.25)$

a. 53.45

b. -52.57

c. 54.53

d. -54.55



## Practice 3

### Adding and Subtracting Rational Numbers: Fractions

1.  $-\frac{8}{3} + \frac{5}{6}$

a.  $3\frac{1}{2}$

b.  $-1\frac{5}{6}$

c.  $1\frac{4}{9}$

d.  $1\frac{5}{6}$

2.  $-4\frac{1}{7} - (-\frac{6}{7})$

a. -5

b. 5

c.  $3\frac{5}{7}$

d.  $-3\frac{2}{7}$

3.  $4\frac{1}{2} - 5\frac{1}{4}$

a.  $9\frac{3}{4}$

b.  $-\frac{3}{8}$

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

d.  $-1\frac{1}{2}$

4.  $2\frac{1}{2} + 3\frac{3}{8} - \frac{1}{16}$

a.  $5\frac{15}{16}$

b.  $5\frac{13}{16}$

c.  $5\frac{3}{8}$

d.  $5\frac{1}{16}$

5.  $\frac{5}{16} + (-\frac{5}{8}) - \frac{1}{2}$

a.  $-\frac{13}{16}$

b.  $\frac{7}{16}$

c.  $-1\frac{7}{16}$

d.  $\frac{13}{16}$

6.  $3\frac{5}{8} + \left(-7\frac{1}{4}\right) + 8\frac{1}{2}$

a.  $19\frac{3}{8}$

b.  $-4\frac{1}{8}$

c.  $4\frac{7}{8}$

d.  $-12\frac{1}{8}$

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7.  $-10\frac{3}{16} + \left(-10\frac{5}{8}\right) - 10\frac{5}{16}$

a.  $-9\frac{7}{8}$

b.  $-30\frac{7}{16}$

c.  $-31\frac{1}{2}$

d.  $-31\frac{1}{8}$

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8.  $8\frac{1}{4} + \left(-10\frac{1}{2}\right) + 12\frac{1}{8} + \left(-12\frac{3}{4}\right)$

a.  $-2\frac{7}{8}$

b.  $43\frac{5}{8}$

c.  $2\frac{1}{2}$

d.  $53\frac{1}{8}$

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$-15\frac{5}{8} + 22\frac{3}{16} + \left(-22\frac{1}{2}\right)$

a.  $-15\frac{5}{16}$

b.  $-60\frac{5}{16}$

c.  $-15\frac{15}{16}$

d.  $-30\frac{15}{16}$

10.  $\frac{1}{2} + \left(-\frac{3}{8}\right) - \frac{1}{8} - \left(-\frac{3}{4}\right)$

a. 0

b.  $\frac{3}{4}$

c. 1

d.  $-\frac{1}{2}$

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# Practice 4

## Dividing Rational Numbers: Fractions

1.  $\frac{3}{8} \div \frac{1}{2}$

a.  $\frac{3}{16}$

b.  $\frac{1}{2}$

c.  $\frac{3}{4}$

d.  $\frac{1}{4}$

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2.  $\frac{5}{8} \div \frac{3}{16}$

a.  $3\frac{1}{3}$

b. 1

c.  $\frac{15}{128}$

d.  $3\frac{1}{4}$

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3.  $5\frac{1}{16} \div 2\frac{5}{8}$

a.  $8\frac{1}{10}$

b.  $13\frac{37}{128}$

c.  $1\frac{5}{14}$

d.  $1\frac{13}{14}$

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4.  $\frac{2}{3} \div 3$

a.  $\frac{2}{9}$

b. 2

c.  $3\frac{2}{3}$

d.  $4\frac{1}{2}$

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5.  $7\frac{1}{2} \div 2$

a.  $\frac{4}{15}$

b. 15

c.  $9\frac{1}{2}$

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

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6.  $16\frac{5}{16} \div 10$

a.  $163\frac{1}{8}$

b.  $1\frac{5}{8}$

c.  $1\frac{101}{160}$

d.  $1\frac{7}{16}$

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7.  $1\frac{5}{9} \div 5$

a.  $4\frac{1}{5}$

b.  $\frac{8}{13}$

c.  $\frac{14}{45}$

d.  $1\frac{5}{8}$

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8.  $2\frac{3}{5} \div 1\frac{3}{5}$

a.  $1\frac{5}{8}$

b.  $4\frac{1}{5}$

c.  $\frac{8}{13}$

d.  $4\frac{4}{25}$

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9.  $20\frac{1}{8} \div 8$

a.  $2\frac{17}{32}$

b. 161

c.  $2\frac{33}{64}$

d.  $161\frac{1}{64}$

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10.  $10\frac{1}{2} \div 5$

a.  $52\frac{1}{2}$

b. 2

c.  $2\frac{1}{10}$

d.  $5\frac{1}{2}$



**1. What is the net gain or the net loss for the Slink Inc. Corporation during the trading day from 9:30 A.M. – 4:00 P.M.**

- a. +\$0.08
- b. -\$1.17
- c. -\$0.50
- d. +\$2.27

**2. The West Coast Stock Exchange recorded the change in the price per share for Slink Inc. every 30 minutes from 9:30 A.M. – 4:00 P.M. What is the average change in the price per share during this time frame? (Round to the nearest penny)**

- a. - \$0.39
- b. +\$0.05
- c. +\$0.07
- d. -\$0.04

**3. If Slink Inc. started the trading day at a price of \$92.50 per share (9:00 A.M), what was the closing price for Slink Inc. at the end of the trading day (4:00 P.M.)?**

- a. \$92.00
- b. \$91.70
- c. \$91.02
- d. \$92.50

**4. During which time of the trading day was Slink Inc.'s stock at its highest price?**

- a. 9:30 A.M.
- b. 10:00 A.M.
- c. 11:00 A.M.
- d. 4:00 P.M.

**5. What is the net gain or the net loss for the Giggy Tech. Corporation stock during the trading day from 9:30 A.M. – 4:00 P.M.?**

- a. -1
- b.  $\frac{3}{4}$
- c.  $-\frac{1}{2}$
- d.  $-\frac{1}{4}$

**6. The West Coast Stock Exchange recorded the change in the price per share for Giggy Tech every 30 minutes from 9:30 A.M. – 4:00 P.M. What is the average change in the price per share during this time frame?**

- a.  $-\frac{1}{28}$
- b.  $-\frac{1}{16}$
- c.  $-\frac{1}{56}$
- d.  $-\frac{3}{4}$

7. If Giggy Tech ended the trading day at a price of  $\$93\frac{1}{4}$  per share (4:00 P.M), what was the price for Giggy Tech at the opening bell (9:00 A.M.)?

a.  $\$93\frac{3}{4}$

b.  $\$92\frac{3}{4}$

c.  $\$93\frac{1}{8}$

d.  $\$93\frac{1}{4}$

8. After analyzing both graphs, which statement accurately summarizes the data shown?

a. Giggy Tech outperformed Slink Inc. stock at the West Coast Stock Exchange closing bell.

b. Slink Inc. had less negative changes in the price per share at the West Coast Stock Exchange closing bell.

c. Slink Inc. and Giggy Tech stock both earned approximately the same net loss at the West Coast Stock Exchange closing bell.

d. Slink Inc. outperformed Giggy Tech stock at the West Coast Stock Exchange closing bell.



**1. What is the median price per share during the time frame (9/24 - 10/5) shown in the GhostWorlds Price per Share graph? (Round to the nearest hundredth)**

- a. \$62.94
- b. \$61.88
- c. \$62.60
- d. \$62.88

**2. If a stockholder's investment yielded \$12,600.00 at the closing bell and the price per share at the close was \$63.00, how many shares of the stock did the stockholder own?**

- a. 793,800
- b. 200.6
- c. 260
- d. 200

**3. If the stockholder owned 200 shares of GhostWorld's stock, what did the stockholder earn from September 24, 2018 to October 5, 2018?**

- a. + \$12,850.00
- b. + \$12,462.00
- c. + \$388.00
- d. + \$420.00



1. Mystic Media closed at  $\$74\frac{5}{8}$  per share on 10/5/18. This closing price created a change in the price per share from the previous day of  $\$3\frac{1}{2}$ . What was the closing price per share for Mystic Media stock on 10/4/18?

a.  $\$71\frac{1}{8}$

b. \$7

c.  $\$78\frac{1}{8}$

d.  $\$74\frac{1}{4}$

2. When evaluating Mystic Media's 52 Week Hi and the 52 Week Lo you see a drastic difference in the price per share. If you were to invest \$10,000 on the day of the 52 Week Lo, how many shares of Mystic Media stock would you own? Convert the total shares from fractional form to decimal form.

a. 205.13 shares

b. 20.13 shares

c. 200.56 shares

d. 214.56 shares

3. If you were to take your shares of Mystic Media stock and sell them on the day of the 52 Week Hi, what would be your profit from purchasing Mystic Media stock? (Round to the nearest whole number)

a. \$16,488

b. \$6,488

c. \$648

d. \$1,648



**1. A stockholder has  $155 \frac{1}{16}$  shares of The Raptor Corporation. How much money did the stockholder have on October 9<sup>th</sup> at the closing bell on the West Coast Stock Exchange? (Convert Fractions to decimals)**

- a. approximately \$9,920
- b. approximately \$10,001
- c. approximately \$17,839
- d. approximately \$15,650

**2. Utilize The Raptor Corporation closing Price per Share for October 10<sup>th</sup>. How much money did the stockholder lose from October 9<sup>th</sup>-October 10<sup>th</sup>? (Convert Fractions to decimals)**

- a. approximately \$9,400
- b. approximately \$4
- c. approximately \$600
- d. approximately \$1400





**1. A stockholder invests \$25,000 on September 28th into all five companies displayed on the graph. The stockholder invests \$5000.00 into each company. How many more shares of Stardusttechnologies than Imaginavigations does the stockholder own? (Round shares to the nearest whole number)**

- a. approximately 97 shares
- b. approximately 180 shares
- c. approximately 82 shares
- d. approximately 1031 shares

**2. Utilizing the number of shares the stockholder purchased on October 28th, how much profit would the stockholder make on the investment for GhostWorld's on October 5th? (Round to the nearest whole number)**

- a. approximately \$76.00
- b. approximately \$63.00
- c. approximately \$526.00
- d. approximately \$5700.00

**3. Utilizing the number of shares the stockholder purchased on October 28th, how much profit would the stockholder make on the investment for Mystic Media on October 5th? (Round to the nearest whole number)**

- a. no profit was made
- b. approximately \$782.00
- c. approximately \$64.00
- d. approximately \$550.00

**4. Utilizing the number of shares the stockholder purchased on October 28, 2018, which company produced the greatest profit for the stockholder's investment on October 5, 2018? (Round to the nearest whole number)**

- a. Mystic Media
- b. GhostWorlds
- c. Stardusttechnologies
- d. The Raptor Corporation



**1. Calculate the average change for SLINK Inc. stock from 9:30 – 12:30? Which of the following represents the average change? (ROUND TO THE NEAREST HUNDREDTH)**

- a. \$0.10
- b. approximately \$0.01
- c. approximately \$1.01
- d. approximately \$0.14

**2. Calculate the average change for SLINK Inc. stock from 1:00 – 4:00? Which of the following represents the average change? (ROUND TO THE NEAREST HUNDREDTH)**

- a. approximately -\$0.02
- b. -\$0.20
- c. approximately -\$0.03
- d. approximately -\$2.85

| Time     | Change in Price | Cost per Share |
|----------|-----------------|----------------|
| 9:00 AM  | -               | \$110.00       |
| 9:30 AM  |                 |                |
| 10:00 AM |                 |                |
| 10:30 AM |                 |                |
| 11:00 AM |                 |                |
| 11:30 AM |                 |                |
| 12:00 PM |                 |                |
| 12:30 PM |                 |                |
| 1:00 PM  |                 |                |
| 1:30 PM  |                 |                |
| 2:00 PM  |                 |                |
| 2:30 PM  |                 |                |
| 3:00 PM  |                 |                |
| 3:30 PM  |                 |                |
| 4:00 PM  |                 |                |

3. The West Coast Stock Exchanges opening bell sounded at 9:00 AM Slink Inc. opened the day at a trading value of \$110.00 per share. If Slink Inc. opened at \$110.00 per share, at what time during the trading day was Slink Inc.'s Cost Per Share at its **lowest** point?

- a. 2:30 PM
- b. 10:00 AM
- c. 1:00 PM
- d. 11:30 AM

4. The West Coast Stock Exchanges opening bell sounded at 9:00 AM Slink Inc. opened the day at a trading value of \$110.00 per share. If Slink Inc. opened at \$110.00 per share, at what time during the trading day was Slink Inc.'s **Cost Per Share at its highest point?**

- a. 4:00 PM
- b. 2:00 PM
- c. 10:00 AM
- d. 11:30 AM

5. What conclusions can you draw (minimum of 3) about how Slink Inc. performed on the West Coast Stock Exchange on that particular day?

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6. Would you recommend to create a line graph to represent the changes in price over the course of the day opposed to a bar graph? Why or why not?

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1. Calculate the average change for SLINK Inc. stock from 9:30 – 12:30? Which of the following represents the average change?

- a.  $-\frac{1}{7}$  or -\$0.14
- b.  $-\frac{1}{5}$  or -\$0.20
- c.  $\frac{1}{14}$  or -\$0.07
- d.  $\frac{1}{7}$  or +\$0.14

2. Calculate the average change for SLINK Inc. stock from 1:00 – 4:00? Which of the following represents the average change?

- a.  $\frac{17}{21}$  or \$0.81
- b.  $\frac{23}{56}$  or +\$0.41
- c. 0 (*EVEN*)
- d.  $\frac{9}{19}$  or -\$0.47

| Time     | Change in Price | Cost per Share    |
|----------|-----------------|-------------------|
| 9:00 AM  | -               | $112\frac{5}{16}$ |
| 9:30 AM  |                 |                   |
| 10:00 AM |                 |                   |
| 10:30 AM |                 |                   |
| 11:00 AM |                 |                   |
| 11:30 AM |                 |                   |
| 12:00 PM |                 |                   |
| 12:30 PM |                 |                   |
| 1:00 PM  |                 |                   |
| 1:30 PM  |                 |                   |
| 2:00 PM  |                 |                   |
| 2:30 PM  |                 |                   |
| 3:00 PM  |                 |                   |
| 3:30 PM  |                 |                   |
| 4:00 PM  |                 |                   |

3. The West Coast Stock Exchanges opening bell sounded at 9:00 AM Slink Inc. opened the day at a trading value of  $112\frac{5}{16}$  per share. If Slink Inc. opened at  $112\frac{5}{16}$  per share, at what time during the trading day was Slink Inc.'s **Cost Per Share at its lowest point?**

- a. 3:00 PM
- b. 9:30 AM
- c. 12:00 NOON
- d. 12:30 PM

4. The West Coast Stock Exchanges opening bell sounded at 9:00 AM Slink Inc. opened the day at a trading value of  $112\frac{5}{16}$  per share. If Slink Inc. opened at  $112\frac{5}{16}$  per share, at what time during the trading day was Slink Inc.'s **Cost Per Share at its highest point?**

- a. 4:00 PM
- b. 2:30 PM
- c. 9:00 AM
- d. 1:30 PM



# Progress Monitoring Form



| TOTALS                             |                  |               |
|------------------------------------|------------------|---------------|
| UMTMM: SC 9                        | 4                |               |
| UMTMM: SC 8                        | 4                |               |
| UMTMM: SC 7                        | 4                |               |
| UMTMM: SC 6                        | 2                |               |
| UMTMM: SC 5                        | 3                |               |
| UMTMM: SC 4                        | 3                |               |
| UMTMM: SC 3                        | 8                |               |
| Practice 4: Dividing Fractions     | 10               |               |
| Practice 3: Add/Subtract Fractions | 10               |               |
| Practice 2: Add/Subtract Decimals  | 10               |               |
| Practice 1: Fractions to Decimals  | 5                |               |
| UMTMM: SC 2                        | 2                |               |
| UMTMM: SC 1                        | 2                |               |
|                                    | Points Available | Points Scored |