

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

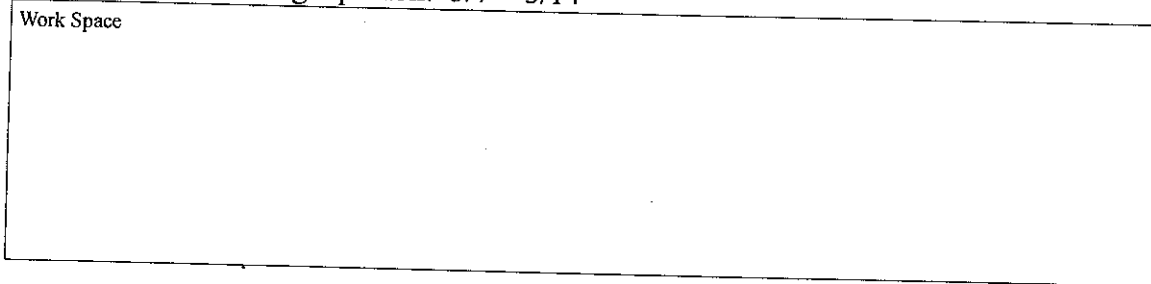
Math: Quarter One

**Directions: Solve and choose the correct answer. You must show your work for each problem in the space provided.**

CCSS 6.NS.1

1) Solve the following equation:  $3/7 \div 5/14$

Work Space



a.  $1/5$

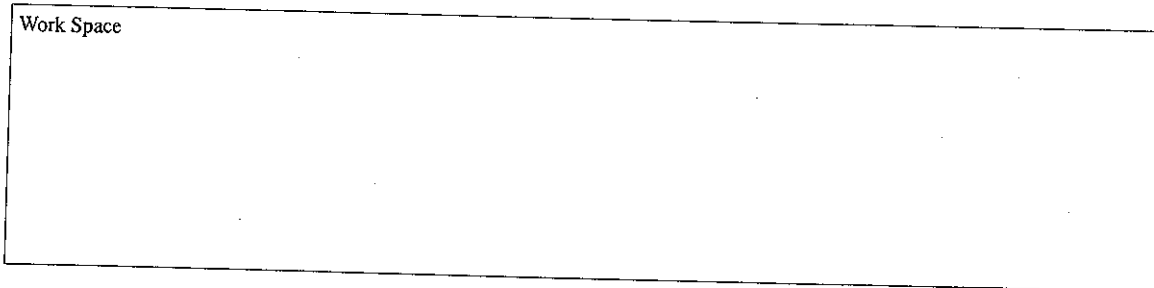
b.  $42/35$

c.  $35/98$

d.  $1/2$

2) How much chocolate will each person get if 4 people are sharing  $1\frac{1}{2}$  lb of chocolate?

Work Space



a.  $4\frac{1}{2}$  lb

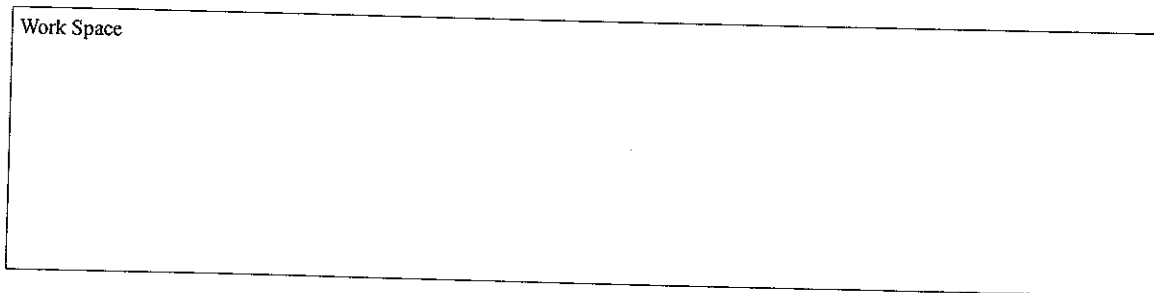
b. 2 lb

c.  $1/2$  lb

d.  $3/8$  lb

3) How long is a rectangular strip of land with width of  $1/4$  mi and area of  $1/5$  mi<sup>2</sup>?

Work Space



a.  $1/20$  mi

b.  $5/4$  mi

c.  $4/5$  mi

d.  $1/4$  mi

4) James has  $2\frac{3}{4}$  lb of sunflower seeds to give away to friends. He wants to give each friend  $\frac{1}{4}$  lb of sunflower seeds. Which equation can he use to figure out how many friends he can share sunflower seeds with?

a.  $2\frac{3}{4} \div \frac{1}{4} = x$

b.  $2\frac{3}{4} \cdot \frac{1}{4} = x$

c.  $\frac{1}{4} \div 2\frac{3}{4} = x$

d.  $\frac{1}{4} + 2\frac{3}{4} = x$

5) A cookie factory uses  $3\frac{1}{4}$  barrels of oatmeal in each batch of cookies. Yesterday, the factory used a total of  $19\frac{1}{2}$  barrels. How many batches of cookies did they make?

Work Space

a.  $6\frac{1}{2}$

b. 8

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

d. 6

CCSS 6.NS.2

6) Solve the following equation:  $2,952 \div 41$ .

Work Space

a. 72

b. 115

c. 80

d. 70

7) Below is Josh's answer to the question  $234 \div 18$ . Is his answer correct?

$$\begin{array}{r} 12 \\ 18 \overline{) 234} \\ \underline{-18} \phantom{0} \\ 44 \\ \underline{-36} \\ 8 \end{array}$$

a. yes

b. no

8) Look again at Josh's work on the problem above. In which step did he make an error?

- a. his answer is correct
- b. division
- c. multiplication
- d. subtraction

9) Below is Sara's work and incorrect answer to  $891 \div 33$ . In which step did she make her error?

$$\begin{array}{r} 28 \\ 33 \overline{) 891} \\ \underline{-60} \phantom{0} \\ 291 \\ \underline{-264} \\ 27 \end{array}$$

- a. her answer is correct
- b. division
- c. multiplication
- d. subtraction

10) Mrs. Nash is taking her class on a field trip and wants to pack a small snack for them. She has 21 students and 500 pretzels. Show your work to figure out how many pretzels each student can have.

Work Space

- a. 24 pretzels
- b. 26 pretzels
- c. 23 pretzels
- d. 25 pretzels

CCSS 6.NS.3

11) Solve the following equation:  $1.7 \cdot 10.82$ .

Work Space

- a. 190.65
- b. 183.94
- c. 18.394
- d. 1.8394

12) Jenny goes shopping with \$100. She spends \$36.12 at Target and \$54.45 at Nike. Show your work to figure out how much money she has left after shopping.

Work Space

- a. \$10.57                      b. \$9.47                      c. \$10.43                      d. \$9.43

13) Bill runs 2.4 miles every day for a week. How many miles will he have run at the end of the week? Show your work.

Work Space

- a. 0.168 mi                      b. 16.8 mi                      c. 1.68 mi                      d. 168 mi

14) John and Cindy make a total of \$56.50 at a lemonade stand. They split their earnings evenly. How much do they each get? Show your work.

Work Space

- a. \$28.25                      b. \$18.25                      c. \$28.20                      d. \$28.50

15) James goes to the hardware store and buys 5 identical wooden boards. When he places them end-to-end, the boards cover a total of 1.375 m. Which equation should he use to figure out the length of each board?

- a.  $5 \div 1.375 = x$                       b.  $1.375 + 5 = x$                       c.  $1.375 \div 5 = x$                       d.  $5 - 1.375 = x$

CCSS 6.RP.1

16) In Clarissa's class, there are 15 boys and 12 girls. Which answer below shows the correct ratio of girls to boys?

- a. 15:12                      b. 5:4                      c. 12:15                      d. 4:5

17) The population of Chicago is about twice that of San Antonio. Write the ratio of the population of Chicago to the population of San Antonio.

- a. 1:1                      b. 1:2                      c. 2:½                      d. 2:1

18) There are 16 students Math Club and 7 of them are boys. William writes the ratio of boys to girls as 7:16. Is his ratio correct?

- a. No, he has the numbers out of order  
b. No, he wrote the ratio of boys to total students instead  
c. No, his ratio is not simplified  
d. Yes, his ratio is written correctly

19) The ratio of boys to girls in choir is 1:3. There are 27 girls in choir. How many total students are in choir?

- a. 36 students              b. 9 students              c. 37 students              d. 30 students

20) Write the ratio of smiley faces to triangles shown in the diagram below.

☺ ☺ ☺ ☺ △ △ △ △ △ △

- a. 2:3                      b. 3:2                      c. 4:6                      d. 6:4

CCSS 6.RP.2

21) We paid \$68 for 17 cheeseburgers. Write the unit rate per cheeseburger.

- a. \$17/cheeseburger              b. \$2/cheeseburger  
c. \$4/cheeseburger              d. \$3/cheeseburger

22) Jeremiah is comparing prices on laundry detergent. Which of the following detergents has the lowest unit price?

- a. 90 oz for \$8.85              b. 100 oz for \$9.87  
c. 75 oz for \$7.99              d. 50 oz for \$5.25

23) Sally fills up her gas tank and then drives 396 miles before she runs out of gas. Her car holds 12 gallons of gas. What is the unit rate of miles per gallon on Sally's car?

- a. 34 mi/gal              b. 35 mi/gal              c. 30 mi/gal              d. 33 mi/gal

24) Write the ratio of \$1,568 in 28 days as a unit rate.

- a. \$56/day                      b. \$46/day                      c. \$36/day                      d. \$28/day

25) The grocery store sells peanuts in bulk. The grocer's sign above the peanuts says, "5 pounds for \$4." Express this information correctly in a unit rate.

- a. \$0.80/lb                      b. 1.25 lb/dollar                      c. neither a or b                      d. both a & b

CCSS 6.RP.3

26) A dressmaker can sew 5 collars in 60 min. How many *hours* will it take to sew 20 collars?

- a. 3                                      b. 240                                      c. 2.5                                      d. 4

27) Tiara and Mariah live 40 miles apart. They decide to ride bikes toward each other's houses and meet in between. They leave at the same time but are traveling at different paces. Tiara is traveling at a pace of 7 miles per hour and Mariah is traveling at a pace of 8.5 miles per hour. How far apart are they after 2 hours of traveling?

- a. 24.5 mi                      b. 9 mi                      c. 20 mi                      d. 14 mi

28) What percent of 500 is 40?

- a. 8%                                      b. 200%                                      c. 80%                                      d. 20%

29) Joe finds a soccer jersey that he likes with a regular price of \$75.00. He buys it with a 25% off coupon. How much does he spend on the jersey with his coupon?

- a. \$65.00                      b. \$50.00                      c. \$56.25                      d. \$18.75

30) Which pair of ratios are proportional?

- a. 4:5, 9:11                      b. 1:3, 7:14                      c. 10:3, 5:2                      d. 15:20, 3:4

Name: Key Date: \_\_\_\_\_  
 Math: Quarter One

**Directions: Solve and choose the correct answer. You must show your work for each problem in the space provided.**

CCSS 6.NS.1

1) Solve the following equation:  $\frac{3}{7} \div \frac{5}{14}$

Work Space

$$\frac{3}{7} \div \frac{5}{14}$$

$$\frac{3}{\cancel{7}^2} \cdot \frac{\cancel{14}^2}{5} = \frac{6}{5} = 1\frac{1}{5}$$

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

b.  $\frac{42}{35}$

c.  $\frac{35}{98}$

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

2) How much chocolate will each person get if 4 people are sharing  $1\frac{1}{2}$  lb of chocolate?

Work Space

$$1\frac{1}{2} \div 4$$

$$\frac{3}{2} \div \frac{4}{1}$$

$$\frac{3}{2} \cdot \frac{1}{4} = \frac{3}{8}$$

a.  $4\frac{1}{2}$  lb

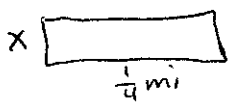
b. 2 lb

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

d.  $\frac{3}{8}$  lb

3) How long is a rectangular strip of land with width of  $\frac{1}{4}$  mi and area of  $\frac{1}{5}$  mi<sup>2</sup>?

Work Space



$$\frac{1}{4} \cdot x = \frac{1}{5} \text{ mi}^2$$

$$\div \frac{1}{4} \quad \div \frac{1}{4}$$

$$\frac{1}{5} \div \frac{1}{4}$$

$$\frac{1}{5} \cdot \frac{4}{1} = \frac{4}{5} \text{ mi}$$

a.  $\frac{1}{20}$  mi

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

c.  $\frac{4}{5}$  mi

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

4) James has  $2\frac{3}{4}$  lb of sunflower seeds to give away to friends. He wants to give each friend  $\frac{1}{4}$  lb of sunflower seeds. Which equation can he use to figure out how many friends he can share sunflower seeds with?

- a.  $2\frac{3}{4} \div \frac{1}{4} = x$       b.  $2\frac{3}{4} \cdot \frac{1}{4} = x$       c.  $\frac{1}{4} \div 2\frac{3}{4} = x$       d.  $\frac{1}{4} + 2\frac{3}{4} = x$

5) A cookie factory uses  $3\frac{1}{4}$  barrels of oatmeal in each batch of cookies. Yesterday, the factory used a total of  $19\frac{1}{2}$  barrels. How many batches of cookies did they make?

Work Space

$$19\frac{1}{2} \div 3\frac{1}{4}$$

$$\frac{39}{2} \div \frac{13}{4}$$

$$3 \frac{39}{2} \cdot \frac{4}{13} = \frac{6}{1} = 6$$

a.  $6\frac{1}{2}$

b. 8

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

d. 6

CCSS 6.NS.2

6) Solve the following equation:  $2,952 \div 41$ .

Work Space

$$\begin{array}{r} 72 \\ 41 \overline{) 2952} \\ \underline{-287} \phantom{0} \\ 82 \\ \underline{-82} \\ 0 \end{array}$$

a. 72

b. 115

c. 80

d. 70

7) Below is Josh's answer to the question  $234 \div 18$ . Is his answer correct?

$$\begin{array}{r} 12 \\ 18 \overline{) 234} \\ \underline{-18} \phantom{0} \\ 44 \\ \underline{-36} \\ 8 \end{array}$$

a. yes

b. no



8) Look again at Josh's work on the problem above. In which step did he make an error?

- a. his answer is correct      b. division  
 c. multiplication       d. subtraction

9) Below is Sara's work and incorrect answer to  $891 \div 33$ . In which step did she make her error?

$$\begin{array}{r} 28 \\ 33 \overline{) 891} \\ \underline{-60} \\ 291 \\ \underline{-264} \\ 27 \end{array}$$

- a. her answer is correct      b. division  
 c. multiplication      d. subtraction

10) Mrs. Nash is taking her class on a field trip and wants to pack a small snack for them. She has 21 students and 500 pretzels. Show your work to figure out how many pretzels each student can have.

Work Space

$$\begin{array}{r} 23 \\ 21 \overline{) 500} \\ \underline{-42} \\ 780 \\ \underline{-62} \\ 18 \end{array}$$

- a. 24 pretzels      b. 26 pretzels       c. 23 pretzels      d. 25 pretzels

CCSS 6.NS.3

11) Solve the following equation:  $1.7 \cdot 10.82$ .

Work Space

$$\begin{array}{r} 10.82 \\ + 1.7 \\ \hline 7574 \\ 10820 \\ \hline 18394 \end{array}$$

- a. 190.65      b. 183.94       c. 18.394      d. 1.8394

12) Jenny goes shopping with \$100. She spends \$36.12 at Target and \$54.45 at Nike. Show your work to figure out how much money she has left after shopping.

Work Space

$$\begin{array}{r} \overset{1}{\$36.12} \\ +54.45 \\ \hline 90.57 \end{array}$$

$$\begin{array}{r} \overset{099}{100.00} \overset{910}{} \\ -90.57 \\ \hline 9.43 \end{array}$$

a. \$10.57

b. \$9.47

c. \$10.43

d. \$9.43

13) Bill runs 2.4 miles every day for a week. How many miles will he have run at the end of the week? Show your work.

Work Space

$$\begin{array}{r} 2 \\ 2.4 \\ \times 7 \\ \hline 16.8 \end{array}$$

a. 0.168 mi

b. 16.8 mi

c. 1.68 mi

d. 168 mi

14) John and Cindy make a total of \$56.50 at a lemonade stand. They split their earnings evenly. How much do they each get? Show your work.

Work Space

$$\begin{array}{r} 28.25 \\ 2 \overline{)56.50} \\ \underline{-4} \phantom{0} \\ 16 \phantom{0} \\ \underline{-16} \phantom{0} \\ 05 \phantom{0} \\ \underline{-4} \phantom{0} \\ 10 \phantom{0} \\ \underline{-10} \\ 0 \end{array}$$

a. \$28.25

b. \$18.25

c. \$28.20

d. \$28.50

15) James goes to the hardware store and buys 5 identical wooden boards. When he places them end-to-end, the boards cover a total of 1.375 m. Which equation should he use to figure out the length of each board?

a.  $5 \div 1.375 = x$

b.  $1.375 + 5 = x$

c.  $1.375 \div 5 = x$

d.  $5 - 1.375 = x$

CCSS 6.RP.1

12:15  
4:5

16) In Clarissa's class, there are 15 boys and 12 girls. Which answer below shows the correct ratio of girls to boys?

- a. 15:12      b. 5:4      c. 12:15      d. 4:5

17) The population of Chicago is about twice that of San Antonio. Write the ratio of the population of Chicago to the population of San Antonio.

- a. 1:1      b. 1:2      c. 2:½      d. 2:1

18) There are 16 students Math Club and 7 of them are boys. William writes the ratio of boys to girls as 7:16. Is his ratio correct?

- a. No, he has the numbers out of order  
b. No, he wrote the ratio of boys to total students instead  
c. No, his ratio is not simplified  
d. Yes, his ratio is written correctly

19) The ratio of boys to girls in choir is 1:3. There are 27 girls in choir. How many total students are in choir?

- a. 36 students      b. 9 students      c. 37 students      d. 30 students

$$\frac{B}{G} = \frac{1}{3} = \frac{9}{27}$$

20) Write the ratio of smiley faces to triangles shown in the diagram below.

☺ ☺ ☺ ☺ △ △ △ △ △ △      4:6  
2:3

- a. 2:3      b. 3:2      c. 4:6      d. 6:4

CCSS 6.RP.2

21) We paid \$68 for 17 cheeseburgers. Write the unit rate per cheeseburger.

- a. \$17/cheeseburger      b. \$2/cheeseburger  
c. \$4/cheeseburger      d. \$3/cheeseburger

22) Jeremiah is comparing prices on laundry detergent. Which of the following detergents has the lowest unit price?

- a. 90 oz for \$8.85 = 0.0983/oz      b. 100 oz for \$9.87 = 0.0987/oz  
c. 75 oz for \$7.99 = 0.1065/oz      d. 50 oz for \$5.25 = 0.1050/oz

23) Sally fills up her gas tank and then drives 396 miles before she runs out of gas. Her car holds 12 gallons of gas. What is the unit rate of miles per gallon on Sally's car?

- a. 34 mi/gal      b. 35 mi/gal      c. 30 mi/gal      d. 33 mi/gal

$$\frac{396 \text{ mi}}{12 \text{ gal}} = 33 \text{ mi/gal}$$

24) Write the ratio of \$1,568 in 28 days as a unit rate.

- a. \$56/day      b. \$46/day      c. \$36/day      d. \$28/day

25) The grocery store sells peanuts in bulk. The grocer's sign above the peanuts says, "5 pounds for \$4." Express this information correctly in a unit rate.

- a. \$0.80/lb      b. 1.25 lb/dollar      c. neither a or b      d. both a & b

CCSS 6.RP.3

26) A dressmaker can sew 5 collars in 60 min. How many hours will it take to sew 20 collars?

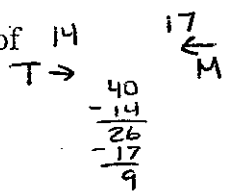
- a. 3      b. 240      c. 2.5      d. 4

$$\frac{5c}{60 \text{ min}} = \frac{20c}{240 \text{ min}}$$

$$240 \text{ min} = 4 \text{ h}$$

27) Tiara and Mariah live 40 miles apart. They decide to ride bikes toward each other's houses and meet in between. They leave at the same time but are traveling at different paces. Tiara is traveling at a pace of 7 miles per hour and Mariah is traveling at a pace of 8.5 miles per hour. How far apart are they after 2 hours of traveling?

- a. 24.5 mi      b. 9 mi      c. 20 mi      d. 14 mi



28) What percent of 500 is 40?

- a. 8%      b. 200%      c. 80%      d. 20%

$$\frac{x}{100} = \frac{40}{500}$$

29) Joe finds a soccer jersey that he likes with a regular price of \$75.00. He buys it with a 25% off coupon. How much does he spend on the jersey with his coupon?

- a. \$65.00      b. \$50.00      c. \$56.25      d. \$18.75

$$\frac{25}{100} = \frac{x}{75.00}$$

$x = 18.75 \text{ off}$

30) Which pair of ratios are proportional?

- a. 4:5, 9:11      b. 1:3, 7:14      c. 10:3, 5:2      d. 15:20, 3:4

