

First name: _____ Last name: _____

Student ID: _____

Chapter 2 Fraction Homework

Basic problems

1. Order from least to greatest.

<p>1.</p> $-0.5, \frac{4}{11}, 0.5625, \frac{-1}{18}, \frac{5}{36}, -0.95, \frac{-1}{4}$
<p>2.</p> $-0.\overline{571428}, 0.\overline{0227}, \frac{15}{64}, 0.86, \frac{-12}{35}, \frac{-21}{25}, 0.\overline{37}$
<p>3.</p> $\frac{-1}{100}, -0.6, 0.\overline{769230}, \frac{11}{12}, \frac{-69}{88}, \frac{-1}{2}, \frac{7}{75}$

2. Write each fraction or mixed number as a decimal. Use a bar to show a repeating decimal.

<p>1.</p> $\frac{69}{100}$	<p>2.</p> $-2\frac{1}{90}$	<p>3.</p> $4\frac{20}{100}$	<p>4.</p> $\frac{22}{300}$
----------------------------	----------------------------	-----------------------------	----------------------------

3. Evaluate. Write the answer in simplest form.

1. $10\frac{2}{5} - 3\frac{3}{9}$	2. $7\frac{1}{2} - \frac{8}{16}$	3. $\frac{5}{11} + 5\frac{1}{8}$
4. $12\frac{2}{3} - 6\frac{3}{6}$	5. $2\frac{1}{15} + \frac{4}{8}$	6. $8\frac{9}{10} - \frac{10}{16}$
7. $4\frac{1}{3} \times 1\frac{7}{8}$	8. $5\frac{5}{7} \times \frac{14}{15}$	9. $6\frac{2}{3} \times 9$
10. $5\frac{2}{5} \div 1\frac{9}{10}$	11. $5\frac{7}{8} \div 4$	12. $16\frac{2}{3} \div 13\frac{1}{6}$

4. Solve. Write the answer in simplest form.

1. $\frac{5}{7} \div q = \frac{15}{7}$	2. $\frac{5}{6} \div k = \frac{25}{18}$
--	---

4.	$b \div \frac{11}{12} = \frac{36}{55}$	5.	$9\frac{8}{9} \div u = 3\frac{8}{27}$
----	--	----	---------------------------------------

5. Solve. Write the answer in simplest form.

1.	$q - \frac{2}{13} = \frac{49}{104}$	2.	$v - 6\frac{4}{14} = 1\frac{8}{21}$
3.	$\frac{4}{11} + j = \frac{19}{22}$	4.	$17 - \frac{5}{13} = s + 14\frac{11}{13}$

Word problems

1. In a creek bed, $\frac{1}{6}$ of the gravel is less than 5 mm in diameter and $\frac{2}{3}$ of it is between 5 and 10 mm in diameter. What fraction of the gravel is greater than one centimeter in diameter?

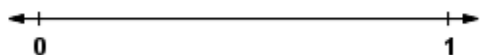
2. Six moles of silver nitrate followed by three moles of silver chloride are added to a vat containing 60 L of water. Of the silver that was added, what fraction came from the silver nitrate?

3. You should know that to convert any fraction into a decimal number you can divide the numerator by the denominator. Are there any fractions where this is not strictly necessary, because you can do the conversion easily in your mind rather than perform the division?

4. Anna's recipe for apple fritters makes eighteen fritters and uses two-thirds of a cup of milk. Anna wants to make six fritters. How much milk will she need?

5. Place $\frac{1}{2}$ on the number line. Make another fraction smaller than $\frac{1}{2}$.

Place the fraction you made on the number line also. Describe how you decided where to put the fractions.



6. Natalie is making chocolate milkshakes for Nicole's birthday party. There will be fourteen people at the party. It takes a third of a cup of milk to make one chocolate milkshake. How many cups of milk will it take to make fourteen milkshakes?

7. A recent forest fire near Littleville destroyed four-fifths of the trees in Bigtree National Forest. The forest covers 4920 km^2 . There is now about 30 tons of salvageable wood per km^2 in the burned area. The part of the forest that was not destroyed by fire will not be open to the salvagers. Assuming the trees are evenly distributed throughout the park, about how long will it take to remove all the salvageable wood at a rate of $53 \frac{1}{2}$ tons per day? Round your answer to the nearest whole number.

8. One-third of the class grew peas, one-third grew carrots, and one-third grew beans. The class consisted of 63 students of which five-sevenths were girls. The teacher chose the three groups to be as equal in their boy-girl composition as possible. How many boys and girls were assigned to each team?

9. A bus is making a trip from Bigtown to Megacity. The average round trip speed is always 54 MPH on this journey. The round trip distance is 120 miles. At Megacity the bus waits exactly 29 minutes and then returns to Bigtown. If the bus has completed $\frac{5}{6}$ of this entire journey, how long has it been since it left Bigtown on the way to Megacity? Round your answer to the nearest minute.

10. Zachary made a list of five different kinds of brownies: chocolate chip brownies, Rocky Road brownies, brownies with walnuts, peanut butter swirl brownies, and butterscotch brownies. He asked seventy-eight students to choose their favorite brownie from the list. Two-thirteenths of the students liked peanut butter swirl brownies the best. Three-thirteenths of the students preferred Rocky Road brownies. Chocolate chip brownies were the favorite of $\frac{7}{39}$ of the students. $\frac{8}{39}$ of the students just loved brownies with walnuts and the rest of the students liked butterscotch brownies best. How many students preferred butterscotch brownies?