

Set 1

1. What is $7 + 7^2 \div 7 + (12 - 3)^2$?
2. What is the volume of a rectangular box with the side measures of 5 in., 8.5 in., and 6.2 in?
3. At the bookstore, Aaron bought 3 paperback books for \$8.59 each and 2 magazines for \$4.89 each. How much change did he get back if he gave the clerk \$40?
4. $\frac{2}{3} \times 3.75 = ?$
5. What is the area of a parallelogram that measures 14.1 centimeters at the base and 7.45 centimeters high? Round to the nearest thousandths.

Set 2

1. If the area of a rectangle is 18m^2 and the width is 7.5 m, what is the length of the rectangle?
2. Abby swims at the local pool every 5 days and volunteers at an animal rescue every 7 days. She did both today, how many days will it be before she does both activities on the same day again?
3. What is the mean of the following list of numbers: 2, 3, 5, 1, 0, 1, 2, 5, 2, 6, 3, 2, 7, 6, 3
4. Out of a random sample of 100 people 15 choose horror movies as their favorite kind. Out of a new sample of 60 people how many could we expect to choose horror movies?
5. On a 4-day hike along the Appalachian Trail in North Carolina, a group of hikers hiked 9.8 miles the first day, 8.3 miles the second day, and 10.4 miles the third day. If they plan to hike a total of 40 miles, how many miles will they have to hike the 4th day?

Set 3

1. Andrea borrowed \$180 from her mom. If she pays her mom back according to the schedule in the table below, how many weeks will it take her to pay her mom back?

Week	1	2	3	4	5
Total Paid (\$)	15	30	45	60	75

2. Alejandro bought 6 angelfish for \$12.90. If he buys 10 more angelfish, each for the same price, how much will he have paid for angel fish in all?
3. It costs \$4.25 to plant tulip bulbs in one square foot of the flowerbed. How much will it cost to plant a flowerbed that is 12ft by 4.5 ft with bulbs?
4. What is the area of a triangle with the base of $20 \frac{1}{2}$ ft and a height of 15ft?
5. What is $9 \frac{1}{2} \times \frac{1}{4}$?

Set 4

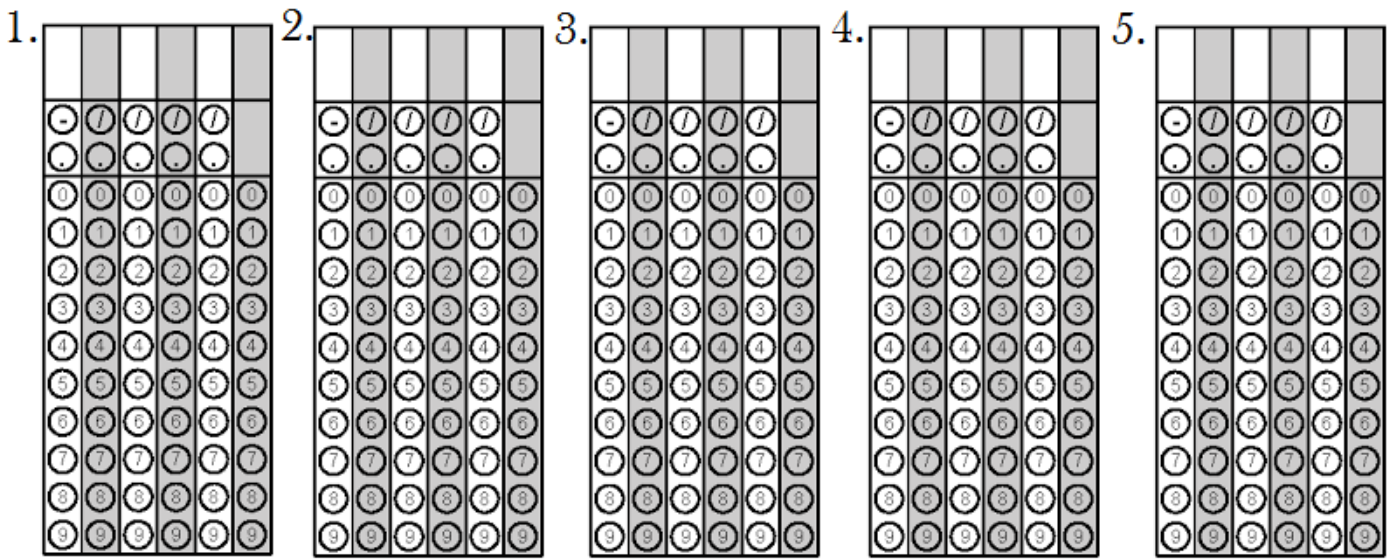
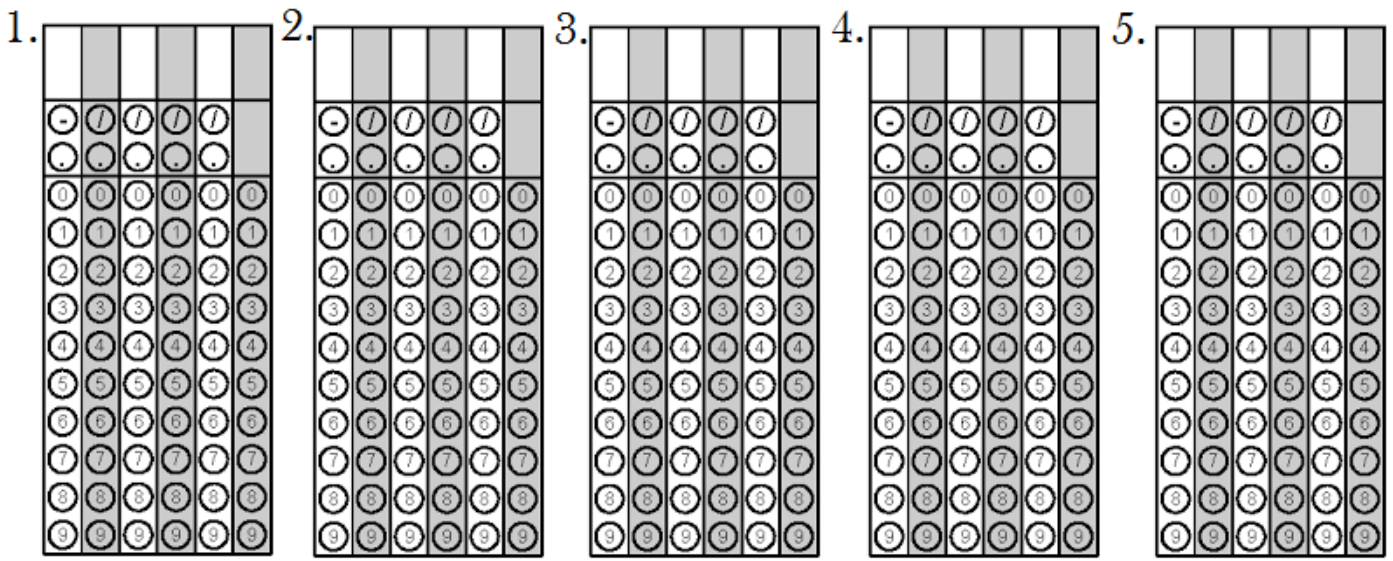
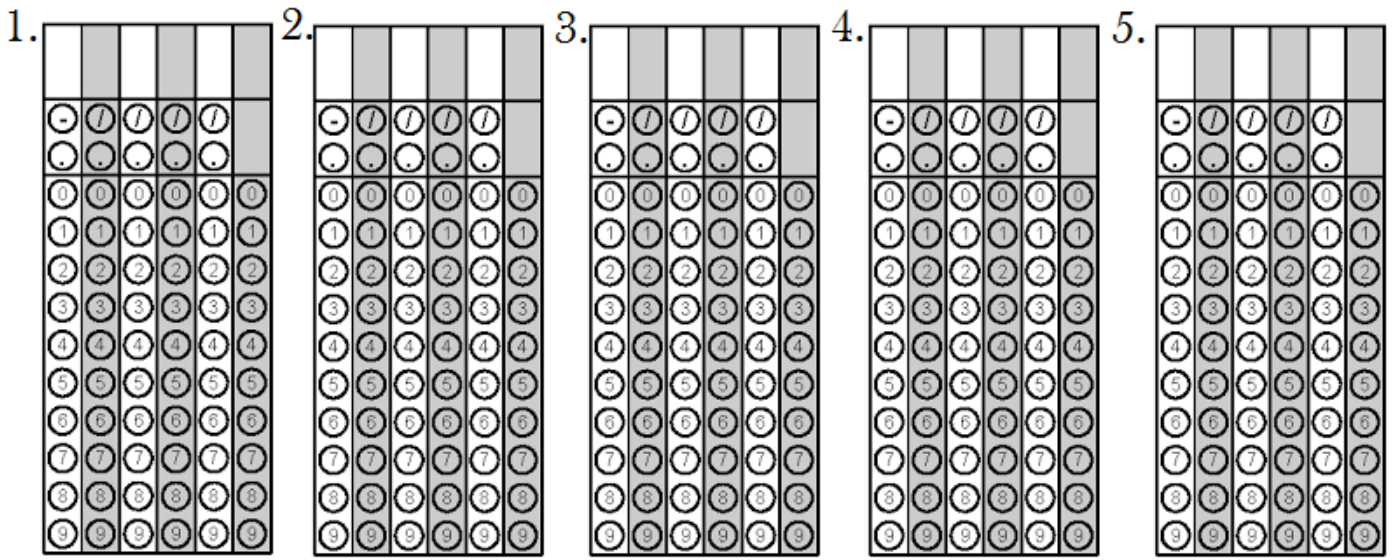
1. In Mr. Mitchell's class $\frac{5}{6}$ of 24 students went on a field trip to the Aquarium on Roanoke Island. How many students when on the fieldtrip?
2. A punch bowl contains $1\frac{1}{4}$ -gallons of punch. How many quarts of punch are in the punch bowl?
3. What is $9.28 \div 0.4$?
4. North Carolina's state bird, the cardinal, weighs about $1\frac{2}{5}$ -ounces. How much do the 12 cardinals at the state exhibit weigh all together?
5. What is $6\frac{2}{5} \times 3\frac{1}{4}$?

Set 5

1. Ms. College cut her rectangular garden diagonally to create 2 triangular sections for different kinds of plants. If the area of one triangle 216.38 square feet what was the area of the total garden?
2. Mrs. Peck bought a used car in New Bern for \$8,951.00 for her oldest daughter. She paid 7% sales tax on the car in addition to the price of the car. How much did she pay after taxes? *For gridded response round your answer to the nearest tenth of a dollar.*
3. The environmental club printed 5,000 flyers for their Earth Day event. After 2 days they had passed out 3,500 of the flyers. What percentage of flyers do they have left?
4. If $a + 12 = 30$, what is the solution for $3a + 12 - a$?
5. What is the result of $2(4^3 - 25) + 12 \div 4$?

Set 6

1. A manufacturer of spiral notebooks finds that about 8 out of every 500 notebooks are defective. If they produce 2,500 notebooks every day, how many defective notebooks can they expect to find during a 5 day work week?
2. Mrs. Peck hands out 48 test tubes and 32 slides for a science experiment. If each student received an equal number of test tubes and slides, what is the greatest number of students in the class?
3. If Ms. College bought 3.2 kilograms of shrimp to feed everyone at her wedding in September, how many grams did she buy?
4. What is the surface area of rectangular prism with the side measures of 23in, 14in, and 15in?
5. The nutrition label on a can of soup states that one serving contains 8% dietary fat. What is the decimal equivalent of 8%?



Answer Key:

Set 1:

1. 95
2. 263.5 in^3
3. $(40 - 35.55) \$4.45$ in change
4. $2 \frac{1}{2}$ which they should NOT grid in this way, but convert to 2.5 or $\frac{5}{2}$
5. $A = b \times h, = 105.045$ make sure your students know, with only 6 spaces for gridding they need pay attention to questions that ask for rounding, as well as remember the decimal gets its own space!

Set 2:

1. 2.4 in
2. 35 days
3. 3.2
4. 9 people – we talk about this problem as a ratio in my class, or a set of equivalent fractions
5. 11.5 Miles on the 4th day

Set 3:

1. 12 weeks
2. \$34.40 for all 16 fish
3. \$229.50 for all 54 ft^2 at \$4.25 a square ft
4. 153.75 ft^2
5. $2 \frac{3}{8}$ or 2.375 – gridded response $\frac{19}{8}$

Set 4:

1. 20 students
2. 5 quarts
3. 23.2
4. $16 \frac{4}{5}$ ounces (options for gridded response: 16.8 and $\frac{84}{5}$)
5. $20 \frac{4}{5}$ (Gridded Response: 20.8 or $\frac{104}{5}$)

Set 5:

1. 432.76 ft^2
2. \$9577.57 or for gridded response 9577.6
3. 30% ($\frac{3500}{5000} = \frac{35}{50}$ used or $\frac{70}{100}$ thus $\frac{30}{100}$ is left)
4. 48
5. 81

Set 6:

1. 200 a week ($\frac{40}{2500}, 40 \text{ a day} \times 5 \text{ days}$)
2. 16 students
3. 3200 grams
4. 1754 in^2
5. 0.08