6ᵗʰ Grade Math Common Core
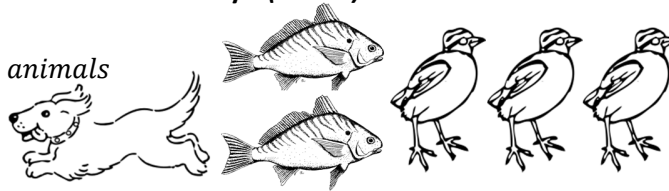
Ratios & Proportional Relationships (6.RP)

The following test covers 6ᵗʰ grade common core standards. Do your best to show all of the things that you have learned. Show all work and copy your answer in the answer blanks on the right.

Write each ratio in three different ways. (6.RP.1)

1. *Fish to birds*
2. *Birds to total animals*

1. _____
   _____
   _____
2. _____
   _____
   _____

Find the missing values in the ratio table.

Then, write the ratio in the blank. (6.RP.3a)

3. _____

4. _____

3.

Pencils	3	15	
Erasers	1		12

4.

Dogs	10	5	
Cats	4		14

Find the unit rate for each situation. (6.RP.3b)

5. 350 *words in* 5 *minutes*   6. 200 *meters in* 40 *seconds*

5. _____

6. _____

Solve (6.RP.2, 6.RP.3b)

7. Three movie tickets cost $19.50. How much will it cost for 5 movie tickets?

7. _____

8. There are 77 students in the 6th grade band. The ratio of girls to boys is 7 ∶ 4. How many girls are in the 6th grade band?

8. _____

9. You can buy a 6 rolls of toilet paper for $6.97 or a 12 pack for $9.24. Which is the better buy?
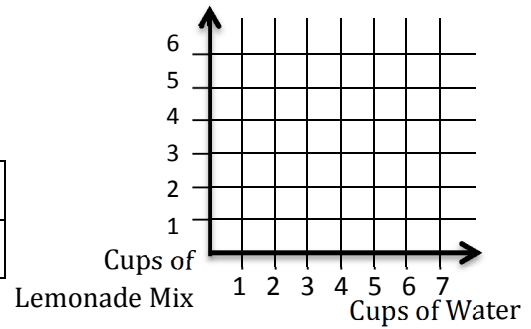
9. _____

10. Sarah can run 8.2 miles per hour. How many miles can she run in 2.5 hours?

10. _____

11. Complete the table and plot the first 3 ratios from the
table on the coordinate plane provided. *(6.RP.1)*

Cups of Water	2	4	6			
Cups of Lemonade Mix	1	2	3			

Cups of
Lemonade Mix

Cups of Water

Write the percent as a fraction in simplest form. *(6.RP.3c)*

12. 35%

13. 150%

Write the fraction or mixed number as a percent. *(6.RP.3c)*

14. $\frac{3}{5}$

15. $2\frac{5}{8}$

Find the percent of a number. *(6.RP.3c)*

16. 12.5% of 56

17. 40% of 90

Find the whole. *(6.RP.3c)*

18. 12% of what number is 30?

19. 40% of what number is 2?

**Complete the statement. Round to the nearest hundredth
if necessary.** *(6.RP.3d)*

20. $13\ in. =$ _____ cm

21. $10\ lb. \approx$ _____ kg

**In Exercises 22–24, use the table that shows the number of first
downs in a football game.**

Team	Bears	Gators
Total First Downs	16	20
By rushing	8	4
By passing	6	15
By penalty	2	1

22. What percent of the Bears' first downs were by passing?

23. Which team had a smaller percent of first downs by penalty?

24. What percent of the Gators' first downs were by rushing?

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____

21. _____

2