Summer Resources

Middle School Math Department
Robinson Secondary School

Math 7

This packet contains practice problems that can be used to help you prepare for your math course in the fall.

Top 5 Topics

The Math 7 teachers have selected these topics as the "Top 5" to review before you begin Math 7.

1. 1-10 Multiplication and Division Facts
   (flash cards are a great resource)
2. Fraction Operations (Rational Numbers)
3. Order of Operations
4. Integer Operations
5. Solving One-Step Equations

Other Resources

Access videos from the following site if you need help with the content in this packet:

https://sites.google.com/fcpsschools.net/rms-math-dept-resource-site/rms-math-department?authuser=1

If you prefer, you could also use one of these workbooks. No workbook is perfectly aligned to a math course, but these will provide a variety of problems to keep your math skills sharp!

McGraw-Hill Education Math Grade 6, ISBN-10: 0071747303

Summer Bridge Activities, Grades 6-7, ISBN-10: 1620576139

Pre-Algebra Concepts (Mastering Essential Math Skills), ISBN-10: 0966621190

Name:_____ Elementary School:_____

Rising Math 7 Students

SHOW ALL WORK WHERE POSSIBLE. There are two sections: a non-calculator and a calculator section.

DO YOU KNOW YOUR MULTIPLICATION TABLES FROM 1 – 12?

The list of websites below contains tutorials, practice, and quizzes on the topics in this packet and more!

- http://www.math.com
- http://www.mathgoodies.com/lessons
- http://education.jlab.org/solquiz/

REMINDER: NO CALCULATORS, please.

Find the answer.

- **Remember that you need to have a common denominator when adding and subtracting fractions and/or mixed numbers.**

1) $\frac{5}{8} + \frac{1}{4}$ 2) $\frac{8}{9} - \frac{5}{6}$ 3) $\frac{8}{9} \bullet \frac{4}{5}$ 4) $\frac{2}{3} \div \frac{1}{4}$

5) Anna works in a department store and earns $7.60 per hour. Last week she worked 39.5 hours. How much money did she earn for the work?

6) Brandon spent ¼ of his time studying math and 1/6 of his time studying history. How much of his study time did he spend studying math and history?

7) A park ranger takes a group of campers on a 5½ mile hike. They have already hike 2 and 1/3 miles. How far do they have yet to hike?

8) Solve using order of operations: $11 \div (12 - 8 \bullet 3)$

9) Solve using order of operations: $(3 + 4 \div 2) \bullet 5$

10) **FILL IN the blanks - Equivalent Fractions, Decimals, & Percents**

Fraction	Decimal	Percent
1/5		20%
2/5	0.4	
	0.6	60%
4/5	0.8	
¼		25%
2/4 or ½		50%
	0.75	75%

Remember that $\frac{1}{1}$ is 1 (which is equal to 100%)

Put the rational numbers in order from least to greatest. It would help you to put all rational numbers in the same form (decimal)

11) $3\frac{1}{2};\ 3\frac{1}{4};\ 3\frac{2}{5}$

12) -1, -12, -7, -9, -3

13) 19.16, 14.9, 19.4

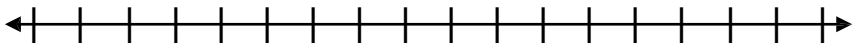
14 - 17) Use an integer to describe each situation.

spending $6 _____ finding a quarter _____

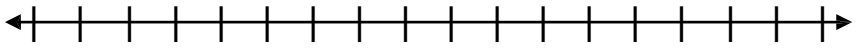
climbing up the ladder 10 feet ____ 10° below zero _____

Use the number line to order the integers from least to greatest. Make sure you put intervals on the number line.

18) 3, -5, 4, -4, -7, 0



19) 1, 3, -7, -6, 5, -2



20 - 23) Simply each expression.

$(-8)(4)$ $\frac{-64}{-8}$ $(-15)+(-7)+(9)$ $43-(-19)$

You can use calculators from this point forward.

Make sure you show any work that supports your knowledge of these concepts.

24) Find the mean of 59, 42, 34, 56, and 34.

25) Find the mode of 97, 82, 80, 92, 80.

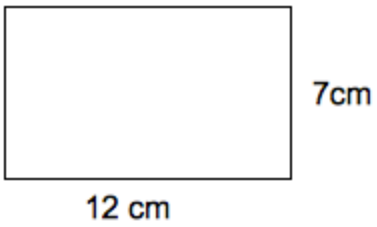
26) Find the median of 19, 35, 21, 27, 20.

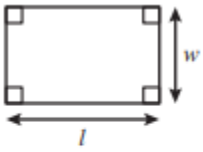
Find the value of the variable in each problem. Show your work.

27) x + 12 = 35 28) y – 21 = 31 29) 4x = 8 30) y ÷ 3 = 7

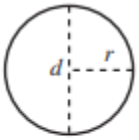
Find the perimeter AND area of each shape.

31)



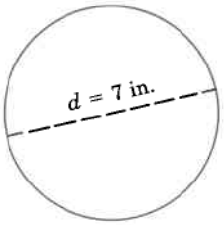


$p = 2l + 2w$
$A = lw$



$C = 2\pi r$
$C = \pi d$
$A = \pi r^2$

32)



Circle all of the ratios that form a proportional relationship.

33)

$\frac{4}{2}$ and $\frac{20}{6}$ $\frac{3}{2}$ and $\frac{18}{8}$ $\frac{4}{3}$ and $\frac{8}{6}$ $\frac{6}{9}$ and $\frac{2}{3}$

Answers:

1. $\frac{7}{8}$
2. $\frac{1}{18}$
3. $\frac{32}{45}$
4. $\frac{8}{3}$ or $2\frac{2}{3}$
5. $-\frac{11}{12}$
6. 25
7. $300.20
8. $\frac{5}{12}$
9. $\frac{19}{6}$ or $3\frac{1}{6}$
10.

Fraction	Decimal	Percent
1/5	**0.2**	20%
2/5	0.4	**40%**
3/5	0.6	60%
4/5	0.8	**80%**
1/4	**0.25**	25%
2/4 or 1/2	**0.5**	50%
3/4	0.75	75%

11. $3\frac{1}{4}$; $3\frac{2}{5}$; $3\frac{1}{2}$
12. -12, -9, -7, -3, -1
13. 14.9, 19.16, 19.4

14–17. -6; 25; 10; -10

18. -7, -5, -4, 0, 3, 4
19. -7, -6, -2, 1, 3, 5

20-23. -32; 8; -13; 62

24. 45
25. 80
26. 21
27. x = 23
28. y = 52
29. x = 2
30. y = 21
31. P = 38 cm; A = 84 cm^2
32. C = 21.98 in; 153.86 in^2
33. $\frac{4}{3}$ and $\frac{8}{6}$ $\frac{6}{9}$ and $\frac{2}{3}$