

Summer Packet 2016

Students Entering 7th Grade

Purpose: This packet is designed to help students stay on track over the summer and enter 7th grade confident and prepared for a great school year. Math teachers have selected the 5 skills that are important for the students' success in 7th grade. For each of these five concepts, students will only be required to work 6 problems totaling 30 problems. If a student struggles with these concepts, I highly recommend that they watch the instructional videos provided. The instructional videos are available by scanning the QR code with a smart phone. The instructional videos are all through Khan Academy, a website that provides great instructional videos and practice for math concepts. After watching the video, students can choose to continue watching videos for extra help or work problems live on the site and get immediate feedback on whether or not their solution is correct. This is not required but may prove beneficial for students that often struggle in math or lose skills over the summer.

Concept 1: Adding, subtracting, multiplying, and dividing with fractions

Directions: Solve each problem showing all steps and circle your answer. Simplify your answer when possible. NO CALCULATOR

1. $\frac{1}{4} + \frac{3}{4} =$

4. $\frac{15}{20} \div \frac{4}{5} =$

2. $\frac{5}{8} - \frac{2}{4} =$

5. $\frac{1}{3} + \frac{2}{6} + \frac{4}{12} - \frac{3}{4} =$

3. $\frac{11}{12} \times \frac{2}{4} =$

6. $\frac{1}{3} \times \frac{2}{6} \times \frac{4}{12} \div \frac{3}{4} =$

Concept 2: Adding, subtracting, multiplying, and dividing with decimals

Directions: Solve each problem showing all steps and circle your answer. Simplify your answer when possible. NO CALCULATOR

1. $4.5 + 2.25 =$

4. $\frac{16.8}{4.2} =$

2. $3.25 - 1.78 =$

5. $16.2 + 7.58 - 3.6 - 1.4 =$

3. $4.82 \times 7.6 =$

6. $5.5 \times 3 \times 2.5 \div 1.5 =$

Concept 3: Writing and solving one-step equations

Directions: Solve the following one step equations. Show all steps and circle your answers.

1. $x + 8 = 25$

2. $\frac{x}{2} = 23$

3. $7.5x = 45$

Directions: Write and solve a one-step equation for each scenario.

4. The difference of a number and 3 is -6.

5. The sum of 10.5 and a number is 23

6. The largest ranch in the world is the Australian Outback. It is about 12,000 square miles, which is 5 times the size of the largest United States ranch. Write and solve an equation to find the size of the largest United States Ranch.

Concept 4: Properties

Directions: Complete the chart.

Property	Definition	Example
Commutative Property of Addition		
Commutative Property of Multiplication		
Associative Property of Addition		
Associative Property of Multiplication		
Additive Identity		
Multiplicative Identity		
Multiplicative Property of Zero		

Directions: Name the property shown by each statement.

1. $(a \times 6) \times 5 = a \times (6 \times 5)$
2. $3 + 7 + 9 = 7 + 3 + 9$
3. $0 \times 12 = 0$
4. $1,272 \times 1 = 1,272$
5. $15 + 0 = 15$
6. $1,000,101 \times 1 = 1,000,101$

Concept 5: Changing numeric expressions to algebraic expressions and vice versa

Directions: Change each verbal expression to a numerical expression.

1. The product of 9 and 17 is then divided by 3
2. Four less than 18
3. Twenty-five increased by 6

Directions: Change each algebraic expression into a numerical expression

4. $9+8$
5. $(9-3) \times 2$
6. $32/y$

QR CODES:

Each QR code links to a video lesson on Khan Academy. At the top of the web page, you will notice you have the option to watch additional videos or do practice problems for extra help.

Adding and Subtracting Fractions



Dividing Fractions



Adding Decimals



Subtracting Decimals



Multiplying Decimals



Dividing Decimals



Associative and Commutative Property



Solving one-step equations



Changing numeric and verbal expressions

