Summer Math Program
Entering Sixth Grade
Week 6

Fast Facts

See how many you can do in one minute!

50 ÷ 10= _____	63 ÷ 9 = _____	54 ÷ 9 = _____	24 ÷ 12=_____
84 ÷ 7 = _____	36 ÷ 3 = _____	24 ÷ 3 = _____	42 ÷ 7 = _____
56 ÷ 8 = _____	45 ÷ 5 = _____	49 ÷ 7 = _____	25 ÷ 5 = _____
72 ÷ 8 = _____	48 ÷ 8 = _____	40 ÷ 4 = _____	36 ÷ 4 = _____
63 ÷ 7 = _____	72 ÷ 6 = _____	32 ÷ 8 = _____	81 ÷ 9 = _____

Mean and Mode

For a Khan Academy lesson on calculating mean and mode for a given set of data, go to:
http://www.khanacademy.org/math/statistics/v/mean-median-and-mode

Find the mean and mode of each of these data sets.

1. hours worked each week
   33, 38, 27, 34, 39, 40, 39, 40, 34, 39, 33, 38, 34

   Mean _____ **Mode** _____

2. number of movies seen
   2, 5, 14, 6, 3, 6, 0, 1, 5, 0, 6, 1, 5, 6, 0, 3, 3, 6, 5, 3

   Mean _____ **Mode** _____

3. 16, 20, 25, 22, 30, 29, 12, 16, 20, 30

   Mean _____ **Mode** _____

4. 20, 12, 35, 16, 34, 28, 34, 28, 1, 30, 15

   Mean _____ **Mode** _____

Answer the following questions about data.

5. Dave's math grades are 82, 71, 89, 88, 82, and 92. What is his mean grade?

6. The mean of nine test scores is 61. If a score of 71 is added to the group of scores, what is the new mean?

a. 62
b. 65
c. 66
d. 68

7. What is the difference between the mean salary of the workers and the mean salary of everyone including the President and Vice-President? You may use a calculator.

Position	**Salary**
President	$256,000
Vice-President	$127,000
Worker #1	$35,000
Worker #2	$20,000
Worker #3	$18,000
Worker #4	$31,000
Worker #5	$24,000
Worker #6	$21,000
Worker #7	$26,000

8. The table shows the scores of 20 students on a history test. What is the average student score?

Score	**Number of Students**
90	3
85	5
80	3
75	4
70	2
60	0
55	3

Perfecting Percents

Find the percent of each part of a whole and express as a percent.

1.) 50 is what percent of 100?

Ex. 50/100(100) =

.50(100) = 50

50 percent

2.) 20 is what percent of 80?

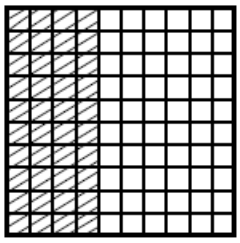
3.) 30 is what percent of 90?

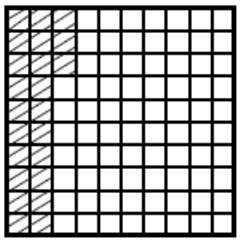
4.) 10 is what percent of 50?

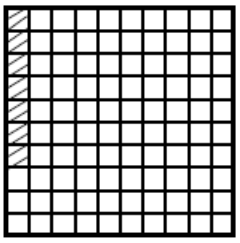
5.) 75 is what percent of 200?

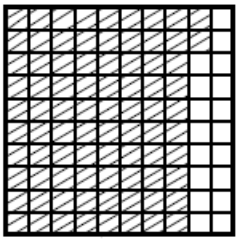
6.) 25 is what percent of 150?

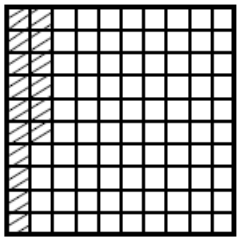
Write the percent of each grid that is shaded.

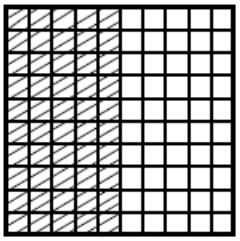
1. 

2. 

3. 

4. 

5. 

6. 

PLACE VALUE PATTERNS

Fill in the table to show the value of each number. One is done for you as a guide.

Decimal	Tenths	Hundredths	Thousandths
1.3	13	130	1300
0.4			
1.5			
0.75			
22.1			

Exciting Extras

The following resources are to help your mathematician with fractions and math fluency. Please use the fraction strips (last page) to compare fractions (e.g., $\frac{3}{4}$ is bigger than $\frac{1}{2}$ but smaller than 5/6), find equivalent fractions (e.g., 5/10 is equal to $\frac{1}{2}$ which is equal to 3/6), and for familiarity with how big or little fractions are relative to one whole. The link below takes you to a website for age-appropriate flashcards you can print and use to practice math fluency. Enjoy!!

http://www.helpingwithmath.com/resources/oth_flashcards.htm

Fraction Strips

1 Whole											
$\frac{1}{2}$											$\frac{1}{2}$
$\frac{1}{3}$										$\frac{1}{3}$	$\frac{1}{3}$
$\frac{1}{4}$									$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$
$\frac{1}{5}$								$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$
$\frac{1}{6}$							$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$
$\frac{1}{8}$						$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$
$\frac{1}{10}$					$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$
$\frac{1}{12}$				$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$