

Hemlock
8th grade

NTI DAY #2
(weather-closed school day)

8

PACKET

TWO

(Math)

General Directions:

Due to weather, Harrison County Schools are closed. In an effort to utilize this day on the school calendar, your child is assigned and should work on this "packet" of school work today. It will count as a grade for this subject. The work attached is specific to the subject listed above. Please contact your child's teacher of this subject at 234-7110 in the event you/your student have questions on this packet. Staff and teachers reported to HCMS today and are available should you have questions.

Central Tendency

Range- difference of the greatest and the least number

Mode- number or numbers that occur the most

Median- the middle number. (after you put them in order)

Mean- the avg number. (add all the numbers and divide by how many there are.)

EXAMPLE

4, 7, 11, 11, 12, 13, 17, 17, 19, 20

Range - $20 - 4 = 16$

Mode- 11 and 17

Median- $12 + 13 =$ divide by two $= 12.5$

Mean- $131 / 10 = 13.1$

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102
7.2 s
24
360
29
25.4 s
105
97
84
5.2
7.4 s
86
14
38.5
41.6 in.
420
103
7.7 s
99
8.1 s
26
92
27.6 s
94
40.8 in.
26.5 s
89
5.5

What Do They Call the Guy Who Invented the First Blue Jeans?

Find each answer and cross out the letter next to it. When you finish, the answer to the title question will remain.

- The scores of 5 golfers on 3 rounds of miniature golf are given in the table. Find each of the following. (Round to the nearest point.)
 - The mean of Ray's scores.
 - The mean of Juli's scores
 - The mean of the scores in Round 1.
 - The range of Hal's scores.
 - The range of the scores in Round 1.
 - The range of the scores in Round 3.

Name	Round 1	Round 2	Round 3
Ray	87	104	99
Hal	108	107	94
Juli	94	83	100
Jack	116	92	119
Kay	103	96	120

- Find the mean of the first 10 counting numbers (1 through 10).
- Find the mean of the squares of the first 10 counting numbers.

- Practice times in the 200-meter dash for 7 runners are given in the table. Find each of the following. (Round to the nearest tenth of a second.)
 - The mean of Raul's times.
 - The mean of the times on Trial 1.
 - The range of the times on Trial 1.
 - The range of the times on Trial 2.
 - The range of all the times given.

Name	Trial 1 (s)	Trial 2 (s)
Lewis	24.4	25.1
Raul	27.2	23.6
Edwin	30.6	27.5
Renaldo	24.1	26.3
Chen	26.0	28.4
Steve	31.3	30.9
Hector	29.9	31.0

- The mean of 4 test scores is 90. What is the sum of the scores?
- If the mean rainfall in New York City was 3.4 inches per month, what was the total rainfall for the year?

- Each student listed in the table has taken 3 math tests. Find the score each student needs on the next test in order to have an 80 average.

Name	Test 1	Test 2	Test 3	Test 4
Bill	78	78	78	_____
Jill	68	79	74	_____
Phil	72	82	82	_____
Will	91	64	76	_____

- Huck's bowling average over 5 games was 100. He scored 118 on the next game. What was his new average?

What Happened to the Cat Who Swallowed a Ball of Yarn?

Cross out the box containing each correct answer. When you finish, write the letters from the remaining boxes in the spaces at the bottom of the page.

① Find the median for each set of data.

- A. 49, 32, 67, 55, 58
- B. 3.1, 5.2, 4.4, 5.0, 3.8, 2.6, 4.7
- C. 29, 12, 30, 22, 7, 23, 36, 15, 18, 9
- D. 81.6, 83.7, 78.5, 82.8, 81.2, 76.3, 83.5, 78.9
- E. 110, 115, 109, 110, 116, 113, 112, 116, 110, 106, 113

F.

Price of Zark VII game at various software stores		
\$41.75	\$43.89	\$42.50
43.40	42.95	39.95
42.90	40.50	40.69
39.95	45.30	42.95

② The weekly salaries for 5 people who work at a Las Vegas hotel are given in the table.

- A. What is the mean salary?
- B. What is the median salary?

Star of stage show	\$45,000
Hotel manager	2,000
Chief chef	1,500
Publicity director	1,100
Lifeguard	400

③ Find the mode (or modes) for each set of data.

A.

Suit Sizes		
36	39	40
37	39	41
37	39	41
38	40	41
38	40	42
38	40	44
39	40	44

B.

Times in 50-m Dash (s)			
5.7	6.3	6.7	6.9
5.9	6.3	6.7	7.0
6.0	6.4	6.8	7.2
6.0	6.5	6.9	7.3
6.2	6.5	6.9	7.3
6.3	6.7	6.9	7.5

C.

Runs Scored				
3	7	2	8	4
1	4	0	5	7
2	2	4	1	5
7	1	5	6	7
0	5	3	2	2
6	4	9	5	9

④ The table gives typing speeds for 12 students in words per minute (wpm). Find the following for this set of data.

- A. The range
- B. The mean
- C. The median
- D. The mode (or modes)

Name	Speed (wpm)	Name	Speed (wpm)
Danny	31	Allison	30
Celeste	27	Ramon	24
Michael	15	George	18
Kalon	31	Jackie	35
Matt	24	Kim	28
Rachel	13	Robert	24

TH	SH	ON	E	OW	EH	IT	GL	AD	SO	M
25.5 wpm	3	20	22 wpm	\$1,500	27 wpm	6.9 s	112	82.1	24 wpm	\$11,200
E	KN	IT	IS	CA	TE	AM	YA	NK	NS	RN
2 and 5	\$42.70	6.5 s	55	25 wpm	38	81.4	40	4.4	\$43.20	\$10,000

What Do You Get When You Cross the Atlantic with the Titanic?

Find each answer at the bottom of the page and cross out the letter above it (some are rounded).

1. Practice times for five swimmers in the 50-meter freestyle are given in the table. Find the following:

- The mean of Mike's times.
- The mean of Jason's times.
- The mean of the times on Trial 1.
- The median of Ryan's times.
- The median of the times on Trial 4.
- The mode of all 20 times in the table.

Name	Trial 1 (s)	Trial 2 (s)	Trial 3 (s)	Trial 4 (s)
Mike	34.1	33.8	30.5	31.6
Alan	32.5	33.3	34.0	33.8
Jason	41.7	40.0	39.2	38.4
Scott	29.4	29.4	31.0	31.6
Ryan	33.8	32.5	33.8	33.4

2. The weekly salary for 10 people is given in the table. Find:

- The mean salary.
- The median salary.
- The mode of the salaries.

Weekly Salary	No. of People
\$2400	1
\$900	1
\$600	3
\$500	5

3. The mean weight of 32 math students is 98.3 lb. If the students could all stand on the scale together, what would their total weight be?

4. The Pie Arsquare Bakery sold 869 pies during the month of January. What was the mean number of pies sold per day?

5. Julie has taken 5 tests in science this semester. On the first three tests, her mean score was 70%. On the last two tests, her mean score was 90%. What is the mean of all five scores?

6. On his trip to the mountains, Klink drove for 3 hours at an average speed of 50 mph, then for 2 hours at an average speed of 30 mph. What was his average speed for the entire trip?

7. As an experiment, Rex tossed 3 coins together and counted the number of heads. He repeated the experiment 25 times. The outcomes are given in the table. What is the mode?

Tossing 3 Coins: Number of Heads				
2	0	2	3	2
1	3	2	0	1
2	2	1	1	2
0	3	1	2	1
2	1	1	2	3

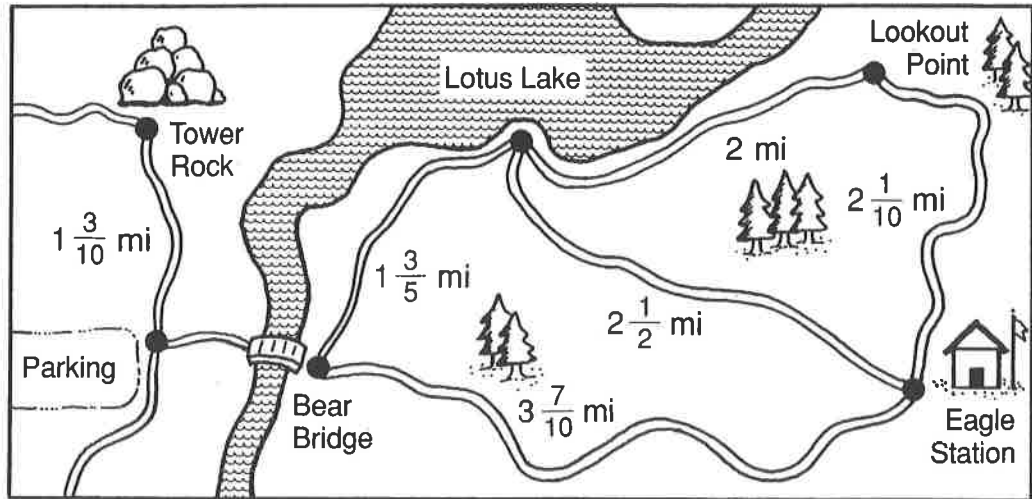
8. Marissa has taken four 100-point tests in math this semester. Her mean score is 89%.

- How many points has she scored altogether on the four tests?
- What score does she need on test #5 so that the mean of all five scores will be 90%?

S	T	H	E	U	P	T	A	L	L	O	I	F	E	W	E	T	A	S	O	Y	E	S
\$500	2	92%	33.4 s	32.5 s	\$550	78%	3215.8 lb	32.9 s	94%	34.3 s	28	1	356	44 mph	33.8 s	3145.6 lb	76%	33.6 s	42 mph	\$580	39.8 s	\$760

What Can You Use to Cut Through Waves?

Use the map to solve the problems below. Cross out the letter next to each correct answer. When you finish, the answer to the title question will remain.



R	$1 \frac{1}{5}$
W	$6 \frac{5}{8}$
E	$9 \frac{2}{5}$
P	$7 \frac{1}{8}$
A	74
T	$3 \frac{1}{4}$
S	$3 \frac{7}{10}$
A	3:30
L	69
E	$8 \frac{1}{5}$
W	$1 \frac{2}{5}$
T	120
S	100
A	$1 \frac{4}{5}$
F	2:45

- On Sunday, Boy Scout Troop 2 hiked from Bear Bridge to Lotus Lake, then to Lookout Point, then to Eagle Station, and then back to Bear Bridge. How far did Troop 2 hike that day? _____ mi
- Jeff hiked $\frac{2}{3}$ of the distance from Lookout Point to Eagle Station and then stopped for lunch. How far had he hiked? _____ mi
- How much farther is it from Eagle Station to Bear Bridge than from Eagle Station to Lotus Lake? _____ mi
- Sierra Hiking Club took 12 tents and 20 sleeping bags on a weekend camping trip. Each tent weighed $5 \frac{3}{4}$ pounds. What was the total weight of the tents? _____ lb
- Monica hiked from Bear Bridge to Lotus Lake in $1 \frac{1}{2}$ hours. She spent 3 hours at the lake and then hiked back to Bear Bridge in $1 \frac{1}{4}$ hours. If she left at 9:00 A.M., what time did she get back? _____ P.M.
- The distance from Tower Rock to Owl Creek (not shown) is $2 \frac{1}{2}$ times the distance from Tower Rock to the parking lot. How far is it from Tower Rock to Owl Creek? _____ mi
- The record for the longest trout caught in Lotus Lake is $25 \frac{1}{2}$ inches. How much shorter than the record was the $18 \frac{3}{8}$ -inch trout that Karen caught? _____ in.
- On July 4 weekend, 180 people hiked on the trails near Lotus Lake. Of these, $\frac{1}{3}$ camped overnight. How many of the hikers did *not* camp overnight? _____