

MATH'S MATE



Term 4 - Sheet 5

Name:

Due Date: / /

Parent's Signature:

QUOTE OF THE WEEK -
There is hope for anyone who can look in the mirror and laugh at what he sees.

1. [+ Whole Numbers to 10]

	2	7	1	-14	8	6	3	-5	10	-9
+ 6										

2. [- Whole Numbers to 10]

	-2	8	15	7	3	11	1	-6	10	14
- 3										

3. [x Whole Numbers to 12]

	2	-3	7	-9	8	12	-6	4	11	-5
x 6										

4. [+ Whole Numbers to 12]

	36	18	-72	63	27	108	-81	99	-45	54
÷ 9										

5. [Large Number +, -] *
7000 - 4324 =

6. [Large Number x, +] *
431 x 180 =

7. [Powers of 10 x, +]
0.02 ÷ 10 =

8. [Decimal +, -] *
4.06 - 1.62 =

9. [Decimal x, +]
0.1 x 0.005 =

10. [Fraction +, -] *
 $\frac{1}{3} + \frac{1}{6} =$

11. [Fractions] *
Which fraction is not equivalent to $\frac{2}{3}$?
A) $\frac{12}{18}$ B) $\frac{8}{12}$ C) $\frac{4}{9}$

12. [Percents] *
A shop sells its bikes for 20% more than the list price. Find the cost price of a \$220 bike. \$

13. [Rates / Ratios] *
Human fingernails grow about five thousandths of a centimeter (0.005 cm) a day. How much do they grow in a week? cm

14. [Exponents / Square Roots]
 $4^4 =$

15. [Order of Operations] *
 $4 \times (-2)^3 + \sqrt{25} =$

16. [Factors / Multiples / Primes] *
Express 108 as the product of its prime factors using exponential notation.

17. [Number Patterns] *
Find the 8th term in the sequence 1, 3, 5, 7,

18. [Number / Place Value] *
Place in order from smallest to largest: $\frac{2}{5}$, 0.5, 5%

19. [Integers]
 $(-4) \times (-5) =$

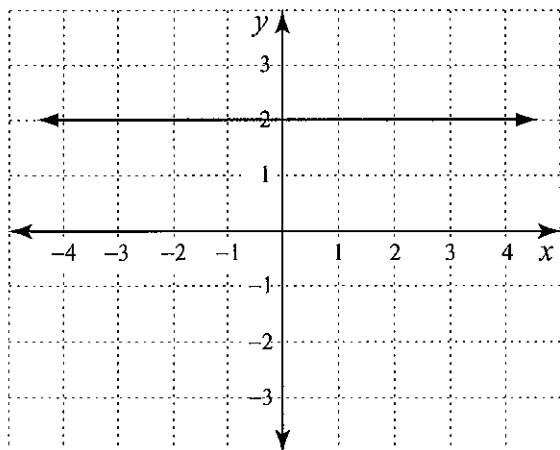
20. [Word Numbers]
Write the number 800,000 in words:

21. [Algebra - Like Terms]
Simplify $2v + 3g - g + v$

22. [Algebra - Substitution] *
If $f = 7$, find the value of: f^2

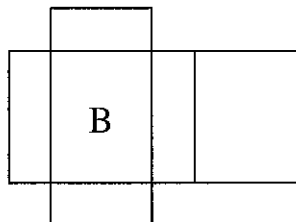
23. [Algebra - Equations] *
If $3x + 1 = 10$, find x $x =$

24. [Coordinate Planes]
The line below is best described as:
A) All points where $x = 2$
B) All points where $y = 2$
C) All points where $x = y + 2$

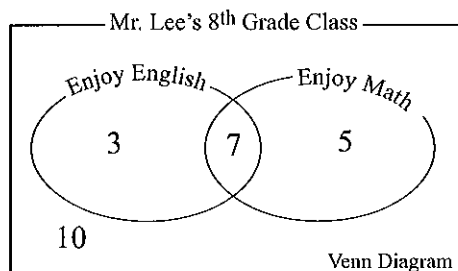


25. [Angles] *
Find the value of x° .
[Diagram not drawn to scale.]
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26. [Geometry]
On this net of a rectangular prism the base B is marked. Label the top face with a T.

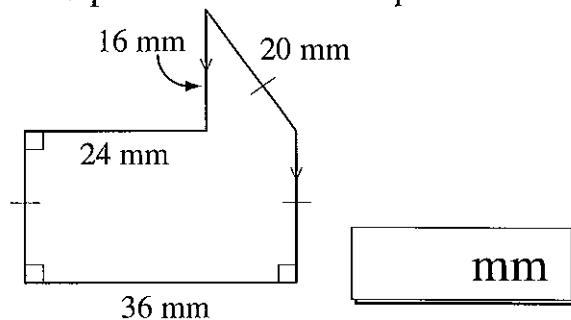


27. [Data / Probability] *
Find the probability that a student selected at random from Mr. Lee's class enjoys English.

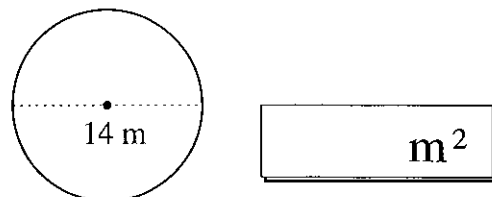


28. [Units of Measurement] *
Some butterflies beat their wings at a rate of 850 beats per second. Is this faster or slower than 1,000,000 beats per hour?

29. [Perimeter] *
Find the perimeter of this shape.



30. [Area] *
Using $A = \pi r^2$ and $\pi \approx \frac{22}{7}$, find the area of a circle with a diameter of 14 m.



31. [Problem Solving 1] *
Paolo can walk 2 miles in the same period that Kim can ride her bike 6 miles. How far will Paolo have walked when Kim has ridden 18 miles?

32. [Problem Solving 2] *
Pierre de Fermat, a 17th century French lawyer, stated that any whole number can be written as the sum of, at most, four square numbers.

For example: $15 = 3^2 + 2^2 + 1^2 + 1^2$
Express 95 as such a sum.

95 =

33. [Problem Solving 3] *
Eight soccer teams play each other once during a tournament. Two points are awarded for each win, one for each draw and zero for each loss. How many points must a team score to be sure that it will finish in the top four?
[The team must finish with more points than at least four other teams.]