1) What is the sum of the GCF of 17 and 51 and the first seven prime numbers?
a) 59
b) 42
c) 75
d) 18
e) NH
2) How many ways can the letters in the word HALLOWEEN be arranged?
a) 354,272
b) 36
c) 362,880
d) 90,720
e) NH
3) Write the reciprocal of $1 \frac{1}{8}$.
a) $\frac{11}{8}$
b) $\frac{8}{11}$
c) $\frac{9}{8}$
d) $\frac{8}{9}$
e) NH
4) What is $75.5 \%$ of 60 ?
a) 45.3
b) 4,530
c) 79.47
d) 43.5
e) NH
5) What is the base of a triangle with a height of 7 cm and an area of $28 \mathrm{~cm}^{2}$ ?
a) 4
b) 8
c) 196
d) 6
e) NH
6) A student had the following scores in math: $89,97,100,85,93,73$, and 100 . What is the positive difference in the median and mode?
a) 3
b) 7
c) 15
d) 11
e) NH
7) Solve: $\left(6 \frac{1}{4} \cdot \frac{2}{3} \cdot 2 \frac{1}{5}\right) \div \frac{5}{6}$
a) $12 \frac{5}{6}$
b) $7 \frac{2}{3}$
c) 11
d) 24
e) NH
8) What is the $10^{\text {th }}$ number in the following sequence? $0,1,3,6,10$, $\qquad$
a) 45
b) 36
c) 38
d) 42
e) NH
9) What is the measure of the complement of a $30^{\circ}$ angle?
a) $160^{\circ}$
b) $60^{\circ}$
c) $150^{\circ}$
d) $50^{\circ}$
e) NH
10) If $a+6=11$ and $7 b=-49$, what is the value of $3 a b$ ?
a) 105
b) 38
c) -38
d) -105
e) NH
11) What is the product of all the positive odd number factors of 70 ?
a) 48
b) 1224
c) 70
d) 1200
e) NH
12) What is the area of a square with perimeter of 44 cm ?
a) $1936 \mathrm{~cm}^{2}$
b) $121 \mathrm{~cm}^{2}$
c) $484 \mathrm{~cm}^{2}$
d) $22 \mathrm{~cm}^{2}$
e) NH
13) What is $35 \%$ of $60 \%$ of 180 ?
a) 153
b) 108
c) 63
d) 37.8
e) NH
14) Simplify: $4^{3}+3 \times 2-6 \div 3+2^{5}$
a) 18
b) 100
c) 75
d) 56
e) NH
15) Solve: $-7 y-5=93$
a) -14
b) 105
c) 14
d) -105
e) NH
16) Find the sum of the first 10 whole numbers that are not prime.
a) 112
b) 97
c) 95
d) 114
e) NH
17) Find the value of $6!+4!+2!+0$ !
a) $479,001,600$
b) 746
c) 747
d) $479,001,601$
e) NH
18) Write $1023_{4}$ in base 10 .
a) 75
b) 4567
c) 6
d) 72
e) NH
19) If $a ; b=5 b-a$, then what does $-7 \times-4$ equal?
a) -13
b) 13
c) 27
d) -27
e) NH
20) Three-fifths of the students made at least an 83 on the exam. What percent of the students did not make at least an 83?
a) .4
b) $40 \%$
c) 6
d) $60 \%$
e) NH
21) Spooky went to the store with $\$ 100$ and bought 5 CDs for $\$ 9.10$ each. Sales tax of $8 \%$ was added to the price at checkout. How much money did Spooky have left?
a) $\$ 49.14$
b) $\$ 38.50$
c) $\$ 45.50$
d) $\$ 50.86$
e) NH
22) One side of a regular pentagon is $5 \frac{1}{2}$ inches. What is its perimeter?
a) 38.5
b) 30.25
c) 33
d) 27.5
e) NH
23) Which of these numbers has 9 as one of its factors?
a) 32,366
b) 114,222
c) $1,087,002$
d) 77,021
e) NH
24) There are 9 red, 4 blue, 5 orange, and 2 white marbles in a jar. Find the probability of choosing a red and blue marble.
a) $13 \%$
b) $65 \%$
c) $55 \%$
d) $50 \%$
e) NH
25) Mr. Ups' son, Downs, got on the elevator on the $8^{\text {th }}$ floor of a 28 -story building. The elevator went up 7 floors, then down 3 floors, and finally down 1 floor. How many floors must he go up to reach the top floor?
a) 19
b) 15
c) 17
d) 11
e) NH

Tie Breakers

1) Solve for $N$ : $\frac{12}{9}=\frac{5}{N}$
2) Simplify: $(27-3+8) \div 8+2(5)$
3) Solve for $x . \quad 9 x+7=16$
