1. What is $x\times2+x\times2+x\times2+x\times2+x\times2+x\times2$ if x is equal to 5?	1.	60
2. Simplify $\dfrac{9}{-\dfrac{6}{9}}$	2.	$-\dfrac{27}{2}$
3. A hamster cage has 3 hiding places. One of the hideouts is split into four parts. How many hiding places are in the cage now?	3.	6
4. What is the value of the expression: $\dfrac{1}{7}\times\dfrac{2}{5}+\dfrac{1}{7}\times\dfrac{3}{5}$?	4.	$\dfrac{1}{7}$
5. A mile is 5,280 ft. How many miles per hour is 528 feet per minute?	5.	6 mph
6. Cross out 3 digits from the number 314159 in such a way that the resulting 3 digit number will be the smallest possible. What is that smallest number?	6.	115
7. Dividing 133 by 29 we find a quotient and a remainder. What is the sum of the quotient and the remainder?	7.	21
8. Four notebooks cost as much as five sharpeners. If 10 sharpeners cost $4.00, how much will 13 notebooks cost?	8.	$6.50
9. Half of a third of a number is 18. What is the number?	9.	108
10. Simplify: $\dfrac{1-\dfrac{1}{2}}{1-\dfrac{1}{3}}$ a. $\dfrac{1}{3}$ b. $\dfrac{4}{3}$ c. $\dfrac{3}{4}$ d. $\dfrac{1}{4}$	10. a b c d ☐ ☐ ☑ ☐
11. What is 25% of 3,600?	11.	900
12. On a recent episode of "Who Wants to Be a Mathematician" a contestant was asked to arrange the following numbers in order lowest to highest: 2/3 0.6666 3/5 0.666 0.67 When in proper order, what is the middle number?	12.	0.6666
13. If k is between 2 and 3, then which of the following is smallest? k k-2 k+3 $-k$ 6-k	13.	-k
14. Express the following complex fraction as a common fraction: $\dfrac{2}{5+\dfrac{3}{1+4}}$	14.	$\dfrac{5}{14}$
15. Find the smallest whole number that is larger than $1\dfrac{1}{2}+2\dfrac{1}{3}+3\dfrac{1}{4}$	15.	8
16. If Ӝ = 6a and ◊ = 3a, what is the value of Ӝ x Ӝ + ◊?	16.	$36a^2+3a$
17. Find the value of $\dfrac{1}{9+\dfrac{1}{5+\dfrac{1}{9}}}$	17.	$\dfrac{46}{423}$
18. Find the length of the longest side of a rectangle with area of 20 in^2 and perimeter of 18 in.	18.	5 inches

19. The average of 5 consecutive integers is 27. One of the integers is removed and the sum of the remaining integers is 106. What is the value of the integer that was removed?	19.	29
20. The three brothers Tom, John, and Steve were born exactly 4 years apart. The eldest is exactly 5 times as old as the youngest. How old is the youngest brother?	20.	2 years
21. Jack and Jill went up the hill at a rate of 4 miles per hour. Once at the top, they returned on the same path at a rate of 6 miles per hour. What was their average rate?	21.	$\dfrac{24}{5}$ mph
22. k is an unknown number between 4 and 5. Which is the largest number? a. $-k+5$ b. $\dfrac{k+4}{2}$ c. $\dfrac{k+2}{2}$	22. a b c ☐ ☑ ☐	
23. A container of eye drops contains 30 ml. The drops are used three times daily and each time 0.05 ml is used in each eye. How many days will the container last?	23.	200 days
24. Express the decimal sum $0.45+0.305+0.05$ as a reduced fraction. a. $\dfrac{71}{200}$ b. 0.805 c. $\dfrac{805}{1000}$ d. $\dfrac{161}{200}$	24. a b c d ☐ ☐ ☐ ☑	
25. How many 3-letter arrangements can be made if the 1st and 3rd letters each must be one of the 21 constants and, and the middle (2nd) letter must be one of the 5 vowels? Do not use the same letter twice. Examples: KOM and XAM. (Note: BOB uses B twice.)	25.	2,100
26. If $-400 \le a \le -300$ and $400 \le b \le 1200$, then the largest value of $\dfrac{b}{a}$ is	26.	-1
27. If all the multiples of 5 and all the multiples of 7 are removed from the list of integers from 1 to 1,000, how many integers remain?	27.	686
28. A group of ten persons were planning to chip in equally to buy an airplane. After the airplane was ordered, one person moved away. As a result, each of the remaining nine persons had to pay an extra $3,000. How much did the airplane cost?	28.	$270,000.00
29. A full tank of oil weighs 30 oz, but a half-full tank of oil weighs 18 oz. What is the weight of the empty tank?	29.	6 oz
30. Two jugs are filled with water. If you remove 1 liter of water from the first jug, then the two jugs contain the same amount of water. If instead you remove 2 liters from the second jug, then the second jug would contain half as much as the first. How many liters of water are in the largest jug?	30.	6 liters
31. Consider the sequence of numbers 11, 28, 45 . . . , in which each number is 17 more than its predecessor. What is the 100th number in the sequence?	31.	1,694
32. If $r + \dfrac{1}{r} = 2015 + \dfrac{1}{2015}$, and $s + \dfrac{1}{s} = 2015 + \dfrac{1}{2015}$, and $r > s$, what is the value of $r \times s$?	32.	1