## 2008 FRANKLIN MATH BOWL Sixth Grade Exam

•	ne bill for dinner, includ d each person have to p	<b>.</b>	people split the bill eve	enly, how much
	A) \$26	B) \$27.50	C) \$23	D) \$24.50
	eger to represent the va 18 feet below sea level	lue in the statement.		
	A) -218		B) 218	
	<ul><li>3) Which sets of numbers does the number 0.4747.</li><li>A) irrational, real</li><li>C) natural, rational, real</li></ul>		belong to? B) rational, real D) real	
4) -3	3 - 8			
	A) 11	B) -5	C) -11	D) 5
5) 7 <sup>2</sup>	? - 4 · 7 = ?			
·	A) x=315	B) x=63	C) x=21	D) x=147
6) 15	50 is what percent of 969	Round your answer to	o the nearest tenth.	
	A) 64%	B) 1.6%	C) 156.3%	D) 15.6%
	rite in symbols: the abs			
	A) $ -3  > 6$	B) $ -6  > 3$	C)  6  > 3	D) - 6  > 3
	oah Field decided to se nare yesterday. How mu			e by \$3.50 per
	A) \$286.50	B) \$5075	C) \$2030	D) \$1015
9) -2	$\frac{24}{0} = ?$			
	<b>A</b> ) 0	B) 1	C) undefined	D) 24

10) 6% of students at a university, about how m A) 42,000 students C) 42 students	•	. If 7000 students are enrolled at the he lecture? B) 420 students D) 4200 students			
11) Find the mode, median, and mean of the data set: 8 12 1 10 12 3. Round your answers to the nearest whole number.					
A) 12,9,8	B) 8,12,9	C) 12,8,9	D) 10,9,8		
12) Which integer between 1 A) 20	0 and 30 is the solution B) 12	to 4x + 10=90? C) 25	D) 15		
13) This summer there are 18 more students in Cynthia's Prealgebra class than in the same class last semester. Counting both semesters, a total of 58 students attended Cynthia's classes. How many students were in her class together?					
A) 20 students	B) 38 students	C) 32 students	D) 18 students		
14) $2\frac{1}{3} + 5\frac{7}{8} = ?$					
A) $2\frac{1}{2}$	B) $8\frac{5}{24}$	C) 1 4 11	D) $5\frac{1}{24}$		
15) $\frac{ 8-33 -2}{9+2} = x$					
A) $x = \frac{21}{11}$	B) $x = \frac{123}{11}$	C) $x = \frac{17}{11}$	D) $x = -\frac{21}{11}$		
16) A gallon of stain covers 200 square feet. How many gallons are needed to paint two coats of stain on a deck that measures 20 feet by 50 feet?					
A) 5 gal	B) 10 gal	C) 20 gal	D) 7 gal		
17) Find the GCF of 16x, and 4.					
A) 16x	B) 1	C) 4	D) 4x		
18) In the metric system of measurement, the prefix kilo- means 1000. Write this number in					

scientific notation.

- 19) Erika spent  $\frac{5}{6}$  of an hour on her computer visiting the History Channel and the Discovery Channel websites. She spent  $\frac{1}{5}$  of an hour at the History Channel website. How many hours did she spend at the Discovery Channel website?

  A)  $\frac{2}{15}$  hr

  B)  $\frac{4}{5}$  hr

  C)  $\frac{3}{5}$  hr

  D)  $\frac{19}{30}$  hr
- 20) What is the value of  $9y + \frac{65}{x}$  if x = 5 and y = 7?

  A) 128

  B) 76

  C) 13

  D) 22
- 21)  $(5 10) \div \frac{-10 15}{-3 2} \frac{1}{5} = ?$ A)  $-\frac{5}{6}$ B)  $\frac{5}{6}$ C)  $\frac{6}{5}$
- 22) Solve the equation: 3(2x 1) = 12A)  $\frac{13}{6}$ B)  $\frac{11}{6}$ C)  $\frac{3}{2}$ D)  $\frac{5}{2}$
- 23) Trina wants to buy a new purse. The store has purses in five different colors. Purses come with shoulder straps or not, and each purse has beads or plain. How many different purses will Trina have to choose from?
  A) 20
  B) 70
  C) 100
  D) 40
- 24) Sally is making a cover for a round table. When finished, the cover will fit exactly with no excess hanging off. Sally has to cut the fabric circle with a 4 inch larger diameter than the table to allow for hemming. If the table has a diameter of 58 inches, how much fabric does Sally need? (Use 3.14 for  $\pi$ . Round to 2 decimal places.)
  - A) 3419.46 sq in.

    B) 11,304 sq in.

    C) 12,070.16 sq in.

    D) 3017.54 sq in.
- 25) Michelle can mop a floor in 15 minutes. Loyd can mop the same floor in 11 minutes. If they work together how long would it take them?

  A) 6.35 minutes

  B) 6.30 minutes

  C) 5.35 minutes

  D) 5.39 minutes