7th Grade

Written Test

2005

1. Simplify $10.5 + \frac{4.5}{009}$

- **a)** $1666\frac{2}{3}$ **b)** 15.5
- c) 510.5
- **d)** 60.5

2. Simplify $7\frac{12}{35} + 8\frac{5}{7}$

- a) $15\frac{22}{35}$ b) $16\frac{2}{35}$ c) $15\frac{11}{35}$ d) $16\frac{22}{49}$

3. Consider the pattern:

XO

XXO

XXXO

XXXXO.....

If the pattern continues, what would be the 30th and 31st characters?

- a) XO
- b) OX
- c) XX
- d) 00

4. A circle has a diameter of 6 cm. A central angle intersects an arc of 60 degrees on the circumference. Approximately how long is the arc in centimeters?

- a) 3.14 cm
- b) 6 cm
- c) 6.28 cm
- d) 12.04 cm

5. The number 3π is closest to which of the following?

- a) $\sqrt{85}$
- b) $\frac{47}{5}$ c) 9.5
- **d)** 10

6. Which of the following can NOT be the length of the third side of a triangle with two sides measuring 5 inches and 7 inches?

- a) 5 inches
- b) 13 inches
- c) 3 inches
- d) 11 inches

7.			blue. The probability low many red marble	
a)	8	b) 20	c) 15	d) 12
8.	What is the area of a	a right triangle with s	ides measuring 5 <i>m</i> , 1	2 m, and 13 m?
a)	$78 m^2$	b) 32 ½ m ²	c) $60 m^2$	d) 30 m ²
9.	tessellate. She choos		use two regular poly of the polygons. Which second?	_
a)	circle	b) octagon	c) pentagon	d) hexagon
10.		a average speed of 60	average speed of 40 mph for 3 hours. Wh	
a)	50 mph	b) 52 mph	c) 55 mph	d) 48 mph
11.	Citizen's Bank. The bus station from the	bus station is 9 km d bank?	. His home is 6 km du ue east of the school.	How far is the
	a) 19 km	b) 5 km	c) 7 km	d) 6 km
12.	The Johnson City Gincreased 25 % from 1997?	irls' Club had 260 me n 1997 to 2002. How r	embers in 2002. The n nany members did th	nembership e Club have in
	a) 195	b) 200	c) 220	d) 208

.

a) 8	b) 14	c) 32	d) 20
14. What is the number	of degrees in an exter	ior angle of a regular	hexagon?
a) 60 degrees	b) 120 degrees	c) 80 degrees	d) 40 de
15. A store has tables for the on November 1 st , they is in preparation for the Claw. What is the selling	reduce the price by an Christmas season, they	additional 8%. Then reduce the price by a	on Decembe
a) \$168.00	b) \$170.25	e) \$180.27	d) \$174.
16. The average of the c		upplement of angle A	measures 95
degrees. What is the me	b) 30 degrees	c) 40 degrees	d) 50 de
	b) 30 degrees rve chocolate pudding g and the recipe make	g at her party. She wa	nts to give ea
a) 80 degrees 17. Jill is planning to se guest 2/3 cup of puddin	b) 30 degrees rve chocolate pudding g and the recipe make	g at her party. She wa	
a) 80 degrees 17. Jill is planning to se guest 2/3 cup of puddin have if she doubles the	b) 30 degrees rve chocolate pudding g and the recipe make recipe? b) 12 rass seed and gave 1/3 awn and found that h	g at her party. She wa es 8 cups. How many s c) 16	nts to give esservings will d) 24 hbor. He the
a) 80 degrees 17. Jill is planning to se guest 2/3 cup of puddin have if she doubles the a) 10 2/3 18. Paul bought some grused 15 pounds on his lead to the second some grounds on his lead to the second some grou	b) 30 degrees rve chocolate pudding g and the recipe make recipe? b) 12 rass seed and gave 1/3 awn and found that h	g at her party. She wa es 8 cups. How many s c) 16	nts to give esservings will d) 24 hbor. He the
a) 80 degrees 17. Jill is planning to se guest 2/3 cup of puddin have if she doubles the a) 10 2/3 18. Paul bought some gused 15 pounds on his lepounds were in the bag	b) 30 degrees rve chocolate pudding and the recipe make recipe? b) 12 rass seed and gave 1/3 awn and found that he at the beginning? b) 60 pounds ry of \$650.00 per weed by \$15 for parking ear	g at her party. She wa es 8 cups. How many s c) 16 of the bag to his neig e had 25 pounds left. I c) 120 pounds	nts to give esservings will d) 24 hbor. He the How many d) 80 po bonus for ea

20. What is the mean of the largest and smallest of the following measurements:

.002 km

2.2 cm

222.2 mm

.22 m

a) 1.011 m

b) 1.0111 m

c) 1.11 m

d) 11.101 m

21. John is 4 ½ feet tall. His shadow at 5 pm is 3 feet long. If the shadow of a tree in his vard at the same time is 20 feet long, how tall is the tree?

a) 13 1/3 feet

b) 30 feet

c) 49.5 feet

d) 18 feet

22. Solve for A **and** B:
$$\begin{bmatrix} 2(A-2) & 0 \\ 0 & \frac{5B+1}{2} \end{bmatrix} = \begin{bmatrix} 6A+8 & 0 \\ 0 & 3B \end{bmatrix}$$

b)
$$A = 3$$
, $B = 1$

a)
$$A = -3$$
, $B = 1$ b) $A = 3$, $B = 1$ c) $A = -5/2$, $B = 2$ d) $A = -3$, $B = -1/2$

d)
$$A = -3$$
, $B = -1/2$

23. Los Angeles is on Pacific Time, which is three hours behind Eastern Time. A plan leaves New York at 8 a.m., has a two-hour layover in Cleveland, and arrives in Los Angeles at 1:45 p.m. What was the actual flying time?

a) 3 hrs, 45 min

b) 6 hrs, 45 min

c) 5 hrs, 45 min

d) 4 hrs, 45 min

24. Bob has 4 cylindrical tubs full of homemade ice cream, each with a diameter d = 6 in and a height h = 6 in. He wants to consolidate the four tubs into one. Which of the following could be the dimensions of a cylindrical tub which holds four times as much as one of the smaller tubs?

a) d = 6 in, h = 12 in b) d = 9 in, h = 9 in c) d = 12 in, h = 6 in d) d = 12 in, h = 12 in

25. Five numbers have a mean of 64 and a median of 60. If the sum of the largest two numbers is 150 and the mode is less than the median, what is the mode of the five numbers?

a) 50

b) 52

c) 55

d) can't be determined