

One-half point per answer

Fill in the following blanks with exact values in decimal form.

- | | |
|-----------------------|---|
| 1. 144 in. = _____ yd | 2. 300 ft. = _____ in |
| 3. 400 m = _____ km | 4. 3.5 L = _____ mL |
| 5. 4.5 cm = _____ mm | 6. $5.1 \text{ mm}^2 = \text{_____ cm}^2$ |

One point per problem

7. Arrange the following from smallest to largest: 4 km, 100 cm , 50 m, 200 mm.
8. Arrange the following from smallest to largest: 1.5 quarts, $\frac{1}{2}$ gallon, $4\frac{1}{4}$ cups, 5 pints.
9. What is the exact circumference of a circle whose area is 36π square centimeters?
10. A rectangular cabinet has the dimensions 12" by 20" by 5". What is the volume of the cabinet to the nearest tenth of a cubic foot?
11. Give the length of the side of a square that has the same perimeter as a rectangle that is 66 cm by 32 cm.
12. A circular flower bed is 6 m in diameter and has a circular sidewalk around it 1 m wide. Find the exact area of the sidewalk in square meters.
13. A store has wrapping paper on sale. Package A is 3 rolls of 4" by 5" for \$5.00. Package B is 5 rolls of 4" by 3" for \$7.00. Which is the better buy, A or B?
14. A container will hold 2.5 gallons, how many quarts will it hold?
15. An aircraft company starts with a square piece of metal measuring 10 in. by 10 in. and wants to remove a strip x in. wide from all sides to form another square with an area of 64 square inches. Find x.

Two points per problem

16. A birthday cake has been baked in a 7" by 7" by 2" pan. Frosting covers the top and sides of the cake. What is the area covered by the frosting?
17. A map is drawn to scale such that $\frac{2}{5}$ in. represents 60 ft. If the shortest route from your house to the school measures 15 in., how many miles, to the nearest hundredth of a mile, is it from your house to the school?
18. A jack is 5 m and a jill is 1 hour. Convert 15 cm per second to its equivalent in jacks per 1 jill.
19. An aquarium is a rectangular prism 60 cm long, 40 cm wide, and 35 cm deep. What is the capacity of the aquarium in liters?

School Name _____

JR. HIGH MATH LEAGUE

Measurement

ANSWER SHEET

GROUP 7-I TEST A

Spring 2001

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1. _____ yd
2. _____ in
3. _____ km
4. _____ mL
5. _____ mm
6. _____ cm²

One point per problem

7. _____, _____, _____, _____
8. _____, _____, _____, _____
9. _____ cm
10. _____ cubic feet
11. side = _____ cm
12. _____ square meters
13. _____ is the better buy
14. _____ quarts
15. $x =$ _____

Two points per problem

16. _____ square inches
17. _____ miles
18. _____ jacks per 1 jill
19. _____ L