

Math Diagnostic Test

Level: F Name: _____

Grade: _____ Date: _____

1. Anna has 36 books. She puts the same number of books on each of 4 shelves. Which expression shows how many books she puts on each shelf?

A $36 + 4$ B 4×36
C $36 - 4$ D $36 \div 4$

2. Which figure has 6 faces?

A rectangular prism B sphere
C cylinder D cone

3.
$$\begin{array}{r} \$5.74 \\ \times \quad 5 \\ \hline \end{array}$$

A \$29.70
B \$28.70
C \$39.38
D \$2.87

4. 8×3

A 36 B 18
C 27 D 24

5. $29 \div 4$?

A 7 B $7r2$
C $7r1$ D 5

6. What is the perimeter of the figure?



A 16 units B 14 units
C 12 units D 15 units

7. An adult ticket costs \$9. A child ticket costs \$5. How much would tickets cost for 3 adults and 7 children?

A \$62 B \$52
C \$24 D \$53

8. What is the value of the 6 in 6307?

A 6000 B 60
C 600 D 6

9. What is the volume of the figure?



A 8 cubic units
B 16 cubic units
C 24 cubic units
D 32 cubic units

10. Which polygon has 8 sides and 8 angles?

A rectangle B octagon
C hexagon D pentagon

11. $7 \times 235 = \bullet$

- A 1680 B 1645
 C 1880 D 1885

12. Which symbol makes this number sentence true?

$1 \times 7 \bullet 0 \times 5$

- A < B >
 C = D -

13. Connie buys 3 pizzas for \$21. How much does each pizza cost?

- A \$8 B \$16
 C \$7 D \$10

14. What is the difference in simplest form?

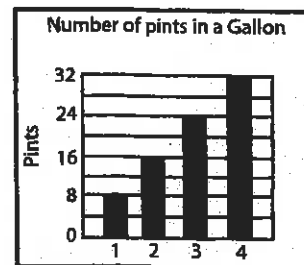
$\frac{5}{6} - \frac{3}{6} =$

- A $\frac{2}{6}$ B $\frac{1}{3}$
 C $\frac{1}{2}$ D $\frac{1}{6}$

15. There are 8 oranges in each bag. Kyle buys 3 bags. How many oranges does he buy in all?

- A 6 B 10
 C 24 D 16

For 16-17, use the bar graph



16. Which rule could you use to find how many pints are in 10 gallons?

- A Multiply number of gallons by 3
 B Multiply number of gallons by 5
 C Multiply number of gallons by 7
 D Multiply number of gallons by 8

17. How many pints are in 3 gallons?

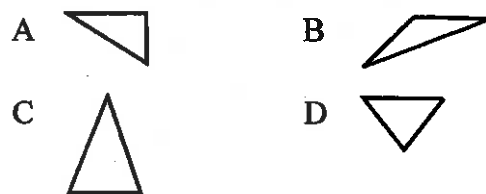
- A 8 B 24
 C 16 D 32

18. Which number makes the number sentences true?

$7 \times \bullet = 63$ $63 \div 7 = \bullet$

- A 2 B 4
 C 3 D 9

19. Which triangle has 3 equal sides?



20. How much more does the ham sandwich cost than the turkey sandwich?

Sandwich Menu	
Turkey	\$2.89
Ham	\$4.75
Tunas	\$1.97

- A \$6.72 B \$1.86
C \$3.88 D \$2.78

21. Lucy buys 8 packages of apples. Each package has 6 apples in it. How many apples does he buy in all?

- A 32 B 48
C 40 D 12

22. Aaron baked 45 cookies for a bake sale. He put them in bags with 9 cookies in each bag. How many bags did he need?

- A 5 B 8
C 9 D 6

23. $4,267 + 1,866 = \bullet$

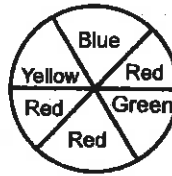
- A 6133 B 6122
C 5132 D 2402

24. \bullet quarts = 2 gallons.

Rule: Multiply the number of gallons by 4

- A 2 B 3
C 8 D 10

25. Which color are you most likely to spin?



- A Red
B Blue
C Yellow
D Green

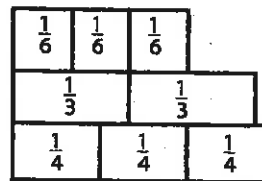
26. $56 \div 7 = \bullet$

- A 6 B 7
C 8 D 9

27. $\begin{array}{r} 78 \\ \times 3 \\ \hline \end{array}$

- A 421 B 224
C 213 D 234

28. Which number sentence is true?



- A $\frac{2}{3} < \frac{2}{3}$ B $\frac{3}{6} > \frac{3}{4}$
C $\frac{3}{4} < \frac{2}{3}$ D $\frac{3}{6} < \frac{3}{4}$

29. $\begin{array}{r} 5,603 \\ -2,867 \\ \hline \end{array}$

- A 2,763 B 2,736
C 1,357 D 2,637

30. What is the sum in simplest form?

$$\frac{5}{10} + \frac{3}{10} =$$

- A $\frac{1}{2}$ B $\frac{8}{20}$ C $\frac{4}{5}$ D $\frac{2}{5}$

31. What is $\frac{7}{10}$ written as a decimal?

- A 0.07 B 7.1
C 0.7 D 710

32. $\bullet = 10 \times 8$

- A 18 B 80
C 70 D 108

33. Which number sentence is true?

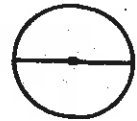
- A $83-15 = 23+45$
B $65+18 = 73$
C $100-76=34$
D $407+19 = 584-152$

34. Which list has the correct names for this figure?



- A quadrilateral, parallelogram, rhombus
B quadrilateral, parallelogram, rectangle
C rectangle, parallelogram, rhombus
D quadrilateral, rectangle, square

35. What part of the circle is a line segment that goes through the center and has endpoints on the circle?



- A center B radius
C diameter D edge

36. Which figure that will not tessellate?



37. Choose the best customary unit to measure the Distance from your house to the school?

- A inch B yard
C foot D mile

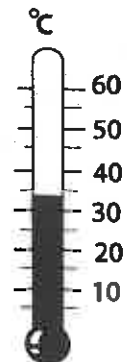
38. Measure the arrow to the nearest inch.



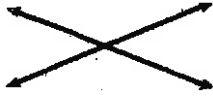
- A 1 in. B 2 in.
C 1 1/2 in. D 2 1/2 in

39. What temperature does the thermometer show?

- A 20° C
B 30° C
C 35° C
D 34° C



40. Which best describes this figure?



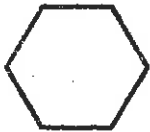
- A ray B right angle
C intersecting D parallel lines

41. Name the fraction of a dollar shown below.



_____ of a dollar

42. What is a name for this figure?



43. $234 \div 9 =$ _____

44. Eric is going to run 6,000 meters.
How many kilometers will he run?

_____ kilometers

45. Write 0.27 in expanded form.
