Multiple Choice

Fill in the circle next to the correct answer.

1. Which of the following is 3,450,026 in word form? (Lesson 1.1)
   A. Three million, four hundred fifty thousand, twenty-six
   B. Three million, four hundred thousand fifty, twenty-six
   C. Three million, fifty thousand four hundred, twenty-six
   D. Three million, forty-five thousand, twenty-six

2. Which number is greatest? (Lesson 1.3)
   A. 15,265
   B. 93,216
   C. 320,182
   D. 320,128

3. Which number when rounded to the nearest thousand is 23,000? (Lesson 1.4)
   A. 22,097
   B. 22,499
   C. 23,400
   D. 23,501

4. Simplify $20 + 10 \times 19 - 7$. (Lesson 2.7)
   A. 140
   B. 203
   C. 360
   D. 563
5. Multiply $52 \times 10^2$. (Lesson 2.3)
   A  52  B  520
   C  5,200  D  52,000

6. Which is the difference between the value of the digit 6 in 2,300,628 and in 846,150? (Lesson 1.2)
   A  600  B  5,400
   C  5,522  D  6,000

7. Which is the remainder when 4,885 is divided by 21? (Lesson 2.6)
   A  12  B  13
   C  14  D  15

8. Express $4 \div \frac{1}{12}$ in simplest form. (Lesson 4.6)
   A  48  B  3
   C  $\frac{4}{12}$  D  $\frac{1}{48}$

9. Find the difference: $\frac{3}{4} - \frac{3}{8}$. (Lesson 3.2)
   A  $\frac{5}{8}$  B  $\frac{3}{8}$
   C  $\frac{1}{2}$  D  $\frac{1}{4}$

10. Find the product: $\frac{3}{4} \times \frac{8}{12}$. (Lesson 4.1)
    A  $\frac{1}{2}$  B  $\frac{2}{3}$
    C  $\frac{5}{12}$  D  $\frac{11}{16}$
11. Estimate the sum of $\frac{6}{7}$ and $\frac{3}{5}$. (Lesson 3.1)
   A  0  B  $\frac{1}{2}$
   C  $1\frac{1}{2}$  D  1

12. What is the difference between $3\frac{1}{2}$ and $1\frac{1}{4}$? (Lesson 3.6)
   A  $2\frac{1}{4}$  B  $3\frac{1}{4}$
   C  $4\frac{3}{4}$  D  $4\frac{1}{2}$

13. Find the area of triangle $ABC$. (Lesson 6.3)
   A  126 cm$^2$  B  98 cm$^2$
   C  63 cm$^2$  D  49 cm$^2$

14. Simplify $4x + 6 - 2x - 1$. (Lesson 5.3)
   A  $6x + 7$  B  $4x + 3$
   C  $8x + 6$  D  $2x + 5$

15. For what value of $y$ will the inequality $3y + 4 < 8$ be true? (Lesson 5.4)
   A  $y = 1$  B  $y = 2$
   C  $y = 3$  D  $y = 4$
16. Glass A contains 236 milliliters of milk. Glass B contains 420 milliliters of milk. What is the ratio of the amount of milk in Glass A to that in Glass B? (Lesson 7.3)

A  89 : 135  
B  119 : 165  
C  479 : 660  
D  59 : 105

Short Answer
Read the questions carefully. Write your answers in the space provided. Show your work.

17. What is the missing number in the box? (Lesson 1.2)

\[ 87,412 = 80,000 + \square + 400 + 10 + 2 \]

18. Order the numbers from greatest to least. (Lesson 1.3)

35,928  164,239  35,982  916,236

19. Find the product of 238 and 4,000. (Lesson 2.2)

\[ 20. \text{ Simplify } 4 \times \{(43 - 19) + [(121 - 3) \div 2]\}. \text{ (Lesson 2.7)} \]
21. There are 215 Grade 5 students in Cherrywood school. Each student spends $17 on a dictionary. How much in all do the students spend on the dictionary? (Lesson 2.8)

22. Mr. Hull is buying computer equipment for his company. The equipment costs $45,900. He pays $5,300 for the first payment. He then pays the rest of the amount in equal payments for 14 months. Find the amount he has to pay each month. (Lesson 2.8)

23. Simplify \((2 + 4) \times 7 - 6 + 11\). (Lesson 2.7)
24. Express \(38 \div 6\) as a fraction in simplest form. Then rewrite the fraction as a mixed number. (Lesson 3.3)

25. Shaun has \(24 \frac{1}{2}\) ounces of beads. He has \(3 \frac{3}{8}\) ounces of beads less than Tony. Find the weight of Tony’s beads. (Lesson 3.7)

26. Express \(24 \frac{1}{4} - 15 \frac{1}{2}\) as a decimal. (Lessons 3.3 and 3.6)
27. Lita jogged \(7 \frac{3}{10}\) kilometers on Friday. She jogged \(1 \frac{3}{4}\) kilometers more on Saturday. How many kilometers did she jog on both days? Give your answer as a decimal. (Lesson 3.7)

28. Multiply \(\frac{70}{6}\) by \(\frac{18}{4}\). Express the product as a mixed number in simplest form. (Lesson 4.3)
29. Jamal runs $1\frac{2}{5}$ miles a day to train for a race. (Lesson 4.5)

a. If he runs the same distance for 3 days a week, what is the distance he runs in one week?

b. If he keeps to this training regime for 8 weeks, what is the total distance he will run in 8 weeks?
30. A ball of string $\frac{9}{10}$ meter long is cut into 3 pieces of the same length. Find the length of each piece. (Lesson 4.6)

31. 3 batteries cost $5r$ and 8 folders cost $2r$. Jason bought 6 batteries and 4 folders. How much does he pay? Give your answer in terms of $r$. (Lesson 5.5)
32. Find the area. (Lesson 6.1)

\[ \frac{3}{4} \text{ in.} \]

\[ \frac{1}{2} \text{ in.} \]

33. The base of the triangle \( ABC \) is as given. Label its height. (Lesson 6.2)

34. Find the area of triangle \( PQR \). (Lesson 6.3)
35. \(ABCD\) and \(ECFG\) are rectangles. \(BC = CF\). What is the total area of the shaded parts of the figure? (Lesson 6.3)

![Diagram of ABCD and ECFG rectangles]

36. The ratio of the masses of flour in two bags is 5 : 7. The heavier bag contains 1,120 grams of flour. What is the total mass of flour in both bags? (Lesson 7.3)

37. Rachel, Sally, and Fabio share a pie in the ratio 1 : 2 : 4. What fraction of the pie does Sally get? (Lesson 7.6)
38. The lengths of three sides of a triangle are in the ratio 3 : 4 : 5. The perimeter of the triangle is 156 centimeters. What is the difference in length between the longest and shortest sides? (Lesson 7.6)

39. Look for a pattern in this set of figures. (Lesson 5.1)

<table>
<thead>
<tr>
<th>Figure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Unit Squares</td>
<td>1</td>
<td>4</td>
<td>9</td>
<td>?</td>
<td>169</td>
</tr>
</tbody>
</table>

a. How many unit squares are in Figure 4?

b. Which figure in this pattern will have 169 small squares?
Extended Response

Solve. Show your work.

40. Poles are placed an equal distance apart along a 6-kilometer road. There is a tree in between every two poles. The figure shows the distance between a tree and two poles. Poles are placed at the start and end of the road. How many poles are there? (Lesson 2.5)

41. A whole number when divided by 4 gives a remainder of 3. The same whole number when divided by 6 gives a remainder of 1. The number is between 70 and 85. What is the number? (Lesson 2.6)
42. Sarah earns $525 more than Andrew each month. They each spend $1,250 a month and save the rest. Sarah does not have any savings at first. After 11 months, she has $8,250 in savings. How much does Andrew earn in a year? (Lesson 2.8)

43. Ivan caught a total of $7\frac{2}{5}$ pounds of fish one day. Of the fish caught, $4\frac{5}{8}$ pounds were sea bass and the rest were mackerel. He gave away $1\frac{7}{8}$ pounds of mackerel. How many pounds of mackerel did he have left? Give your answer as a decimal. (Lesson 3.7)
44. There were \(2\frac{4}{5}\) quarts of milk in Container A and some milk in Container B.
Lisa poured \(1\frac{2}{5}\) quarts of milk each into Container A and Container B.
In the end, the total volume of milk in the two containers was 10 quarts.
How many quarts of milk were in Container B at first? Give your answer as a decimal. (Lesson 3.7)

45. Tyrone read a book for his school project. On the first day, he read 40 pages. On the second day, he read \(\frac{1}{4}\) of the remaining pages.
After the second day, he still had to read \(\frac{1}{2}\) of the total number of pages to complete the book. How many pages are in the book? (Lesson 4.2)
46. A dealership has $9y$ cars, $12y$ trucks and $18$ vans. (Lesson 5.5)
   a. $4y$ cars, $3y$ trucks and $15$ vans are sold. Find the total number of vehicles remaining in terms of $y$.

   b. If the value of $y$ is $7$, are there more trucks or more cars and vans at first?

47. The side of square $JKLM$ is $14$ inches. $KP = MP = JP = LP$.
   Find the total area of the shaded parts. (Lesson 6.3)
48. Freddie has 2 times as many comic books as David. The ratio of the number of comic books David has to the number of comic books Gary has is 5 : 3. Freddie has 110 comic books. How many comic books do David and Gary have in total? (Lesson 7.6)

49. The ratio of the volume of water in Container A to the volume of water in Container B to the volume of water in Container C is 2 : 3 : 8. Container B contains 900 milliliters of water. (Lesson 7.6)
   a. What is the volume of water in Container C?
   b. Find the total volume of water in the three containers.
50. Belinda has 10 cups of flour. She uses 3 cups of it to make a loaf of bread. She uses \( \frac{1}{4} \) cup of the remaining flour for each biscuit she wants to make. How many biscuits can she make with the remaining flour?

51. Mr. Madison has two boxes of blueberries. At first, Box A had 228 more blueberries than Box B. Mr. Madison transfers 600 blueberries from Box A to Box B. Now Box B contains 5 times as many blueberries as Box A. How many blueberries were in each box at the beginning?