This test covers material taught in Dimensions Math 3A.

1 Write the missing numbers.

(a) \(7,000 + 500 + 50 + 5 = \) 

(b) \(2,000 + 30 = \) 

(c) \(40 + 6,000 + 200 + 1 = \) 

(d) \(5,173 = 3 + 70 + \) 

(e) \(2,097 = 7 + 2,000 + \) 

(f) \(6,004 = 6 \text{ thousands} + \) ones

2 In the number 8,103…

(a) The digit _____ is in the hundreds place. Its value is _____.

(b) The digit 0 is in the _____________ place. Its value is ____.

(c) The digit 8 stands for 8 ________________.

(d) Write the number in words.

__________________________________________________________
3. (a) 1,000 more than 4,378 is ______.
(b) 100 less than 1,028 is ______.
(c) 10 more than 5,234 is ______.
(d) $7,787 - 1,000 = \underline{ \hspace{1cm} }$
(e) $2,456 - \underline{ \hspace{1cm} } = 2,446$
(f) $1,908 + \underline{ \hspace{1cm} } = 2,008$

4. (a) The increment between tick marks is ______.
(b) Draw an arrow to show the location of 970.
   Label the arrow with the number.
(c) Draw an arrow to show the tick mark that is halfway between 800 and 900.
   Label the arrow with this number.
(d) Draw an arrow to show the approximate location of 812.
   Label the arrow with the number.
5 An elephant weighs 5,873 pounds.
Round this number to…

(a) The nearest thousand. 

(b) The nearest hundred. 

(c) The nearest ten. 

(d) The highest place. 

6 Use mental calculation to find the value.

(a) 58 + 7 =\[\phantom{0}\phantom{0}\phantom{0}\phantom{0}\phantom{0}]

(b) 46 + 35 =\[\phantom{0}\phantom{0}\phantom{0}\phantom{0}\phantom{0}]

(c) 640 + 160 =\[\phantom{0}\phantom{0}\phantom{0}\phantom{0}\phantom{0}]

(d) 71 − 26 =\[\phantom{0}\phantom{0}\phantom{0}\phantom{0}\phantom{0}]

(e) 280 − 60 =\[\phantom{0}\phantom{0}\phantom{0}\phantom{0}\phantom{0}]

(f) 630 − 490 =\[\phantom{0}\phantom{0}\phantom{0}\phantom{0}\phantom{0}]

(g) 200 − 7 =\[\phantom{0}\phantom{0}\phantom{0}\phantom{0}\phantom{0}]

(h) 5,000 − 70 =\[\phantom{0}\phantom{0}\phantom{0}\phantom{0}\phantom{0}]

7. Look at the bar model and fill in each blank with the correct answer.

(a) The difference between the two numbers is ____________.

(b) The greater number is 400, the lesser number is ____________.

(c) The sum of the two numbers is ____________.

8. A farmer has 100 red and green apples.
27 of the apples are green.
Fill in the blanks and missing numbers.

(a) _____ of the apples are red.

(b) There are _____ more red apples than green apples.
   It sold 99 fewer tacos than burritos.
   How many burritos and tacos were sold in all?

10. Add.

   $$1,955 + 2,125$$

   $$85 + 5,168$$

   $$2,865 + 6,337$$
11 Subtract.

\[
\begin{align*}
8,524 - 35 &= \phantom{0}8,499 \\
2,920 - 2,195 &= \phantom{0}725 \\
4,000 - 1,234 &= \phantom{0}2,766
\end{align*}
\]

12 A total of 1,870 people came to a fair on Sunday. 
1,521 were children. 
How many more children than adults came to the fair?
13 Estimate…

(a) 329 + 69 (by rounding to the nearest ten)  
(b) 750 − 76 (by rounding to the nearest ten)  
(c) 2,696 + 427 (by rounding to the nearest hundred)  
(d) 5,533 − 1,299 (by rounding to the nearest thousand)

14 (a) 4 × [ ] = 24  
(b) 5 = [ ] × 5  
(c) [ ] × 10 = 70  
(d) 3 × 0 = [ ]  
(e) 45 ÷ 5 = [ ]  
(f) 18 ÷ 3 = [ ]  
(g) 36 ÷ 4 = [ ]  
(h) 0 ÷ 8 = [ ]

15 Circle the even numbers.

58  33  91  0  40  46
16 Fill in the blanks.

(a) The quotient of 20 and 5 is _____.

(b) 38 ÷ 5 is _____ with a remainder of _____.

(c) Any number divided by _____ equals itself.

(d) Is the product of 7 × 3 even or odd? __________

17 There are 6 boxes of muffins.
Each box has 5 muffins in it.
How many muffins are there in all?
Complete the equation.

\[ 5 \phantom{0} \hspace{1cm} = \phantom{0} \hspace{1cm} \]

\[ A \phantom{0} = \phantom{0} \hspace{1cm} \]
Emma, Alex and Mei have 27 stickers altogether.
Emma has 5 stickers.
Alex has three times as many stickers as Emma.
How many stickers does Mei have?

(a) Complete the model with the information from the problem.
Use a question mark for the value that needs to be found.

(b) Solve the problem.
Show your equations.
A notebook costs $5.
A set of markers costs 5 times as much as the notebook.

(a) How much more does the set of markers cost than the notebook?

(b) How much do the notebook and the set of markers cost altogether?
20 Multiply.

\[
82 \times 4 \\
\underline{} \\
\underline{} \\
\underline{} \\
\underline{} \\
29 \times 3 \\
\underline{} \\
\underline{} \\
\underline{} \\
\underline{} \\
5 \times 18 \\
\underline{} \\
\underline{} \\
\underline{} \\
\underline{}
\]

21 Multiply.

\[
67 \times 4 \\
\underline{} \\
\underline{} \\
\underline{} \\
\underline{} \\
263 \times 3 \\
\underline{} \\
\underline{} \\
\underline{} \\
\underline{} \\
254 \times 5 \\
\underline{} \\
\underline{} \\
\underline{} \\
\underline{} \\
\underline{} \\
\underline{}
\]
22. There are 198 adults at a show. There are three times as many children at the show. How many people were at the show?

23. (a) $6 \text{ hundreds} \div 2 = \underline{\hspace{2cm}} \text{ hundreds}$
(b) $35 \text{ tens} \div 5 = \underline{\hspace{2cm}} \text{ tens}$
(c) $30 \text{ hundreds} \div 3 = \underline{\hspace{2cm}} \text{ hundreds}$

24. Divide.

$$
\begin{array}{c}
3 \overline{)12} \\
\end{array}
$$

$$
\begin{array}{c}
3 \overline{)120} \\
\end{array}
$$

$$
\begin{array}{c}
3 \overline{)1200} \\
\end{array}
$$
25 Find the quotient and remainder.

\[
\begin{array}{c|c|c}
\text{Divisor} & \text{Dividend} & \text{Quotient} \\
2 & 6 & 3 \\
 & \boxed{8} & \boxed{4} \\
\text{Remainder} & & \\
\end{array}
\]

\[
\begin{array}{c|c|c}
\text{Divisor} & \text{Dividend} & \text{Quotient} \\
3 & 8 & 2 \\
 & \boxed{6} & \\
\text{Remainder} & & \\
\end{array}
\]

\[
\begin{array}{c|c|c}
\text{Divisor} & \text{Dividend} & \text{Quotient} \\
4 & 7 & 1 \\
 & \boxed{4} & \\
\text{Remainder} & & \\
\end{array}
\]

\[
\begin{array}{c|c|c}
\text{Divisor} & \text{Dividend} & \text{Quotient} \\
5 & 9 & 1 \\
 & \boxed{5} & \\
\text{Remainder} & & \\
\end{array}
\]

26 Divide.

\[
\begin{array}{c|c|c}
54 \div 3 & 54 \div 4 & 800 \div 2 \\
\hline
\end{array}
\]

\[
\begin{array}{c|c|c}
54 & \boxed{18} & \boxed{20} \\
3 & & \\
\end{array}
\]

\[
\begin{array}{c|c|c}
54 & \boxed{13} & \boxed{200} \\
4 & & \\
\end{array}
\]

\[
\begin{array}{c|c|c}
800 & \boxed{400} & \boxed{400} \\
2 & & \\
\end{array}
\]
27 Divide.

<table>
<thead>
<tr>
<th>716 ÷ 3</th>
<th>440 ÷ 5</th>
<th>999 ÷ 4</th>
</tr>
</thead>
</table>

28 Circle the expressions where the quotient will be a 2-digit number.

<table>
<thead>
<tr>
<th>303 ÷ 3</th>
<th>254 ÷ 4</th>
<th>54 ÷ 2</th>
<th>800 ÷ 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>299 ÷ 4</td>
<td>299 ÷ 2</td>
<td>438 ÷ 5</td>
<td>203 ÷ 3</td>
</tr>
</tbody>
</table>
29. Alex saved $27 in three months.
   If he saves the same amount each month,
   how many months will it take to save $99?

30. A store sells 3 identical chairs and a desk for $654.
    The desk costs $375.
    How much does each chair cost?
31 A farmer is putting 106 yellow peaches and some white peaches into cartons. Each carton holds 4 peaches. She uses 58 cartons for all the peaches. How many white peaches are there?

32 A baker sells 348 apple tarts in boxes of 4 tarts each. He sells all the boxes for $5 each. How much did he receive from selling the apple tarts?
This bar graph shows the number of each type of ice-cream cones sold by a shop one Saturday morning.

Number of Ice-Cream Cones Sold on Saturday

Strawberry
Coconut
Chocolate
Vanilla
Peanut Butter
Other

(a) The scale is numbered in increments of _______.

(b) Each tick mark on the graph shows an increment of _______.

(c) Which type of ice-cream cone did the shop sell the most? ________________.

(d) How many fewer strawberry than chocolate ice-cream cones were sold?

____________

(e) Which two types of ice-cream cones did they sell the same number of?

_____________________________________________________________

(f) Under which category were cherry ice-cream cones included? ____________
This graph shows the number of visitors to four parks on the last day of three different months.

**Number of People who Visited the Parks**

- **Flower Park**: April - 600, August - 400, December - 500
- **Aqua Park**: April - 1,000, August - 700, December - 800
- **Pumpkin Park**: April - 350, August - 100, December - 200
- **Snow Park**: April - 500, August - 300, December - 400
(a) Which parks had more than 400 visitors in August?

(b) Which park is the least busy in December?

(c) Complete the table using the information from the graph.

<table>
<thead>
<tr>
<th>Park</th>
<th>April</th>
<th>August</th>
<th>December</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flower Park</td>
<td>615</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aqua Park</td>
<td>425</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pumpkin Park</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Snow Park</td>
<td>375</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(d) How many total visitors visited the four parks on the last day of August?

(e) Which park has the most visitors in the three days combined?

(f) How many fewer visitors went to Snow Park in April and August combined than in December?
Answer Key

1. (a) 7,555  (b) 2,030  (c) 6,241  (d) 100  (e) 90  (f) 4

2. (a) 1,100  (b) tens, 0  (c) thousands  (d) eight thousand, one hundred three

3. (a) 5,378  (b) 928  (c) 5,244  (d) 6,787  (e) 10  (f) 100

4. (a) 10

5. (a) 6,000  (b) 5,900  (c) 5,870  (d) 6,000

6. (a) 65  (b) 81  (c) 800  (d) 45  (e) 220  (f) 140  (g) 193  (h) 4,930

7. (a) 100  (b) 300  (c) 700

8. green  [27]  red  [100]
    (a) 73  (b) 46

9. 303 burritos and tacos

10. 4,080
    5,253
    9,202

11. 8,489
    725
    2,766

12. 1,172 more children

13. (a) 400  (b) 670  (c) 3,100  (d) 5,000
14  
(a) 6  
(b) 1  
(c) 7  
(d) 0  
(e) 9  
(f) 6  
(g) 9  
(h) 0

15  
58, 0, 40, 46

16  
(a) 4  
(b) 7, 3  
(c) 1  
(d) odd

17  
5 \times 6 = 30

18  
(a) 
(b) 3 \times 5 = 15  
5 + 15 = 20  
27 - 20 = 7  
Mei has 7 stickers.

19  
(a) $20  
(b) $30

20  
328  
87  
90

21  
268  
789  
1,270

22  
792

23  
(a) 3  
(b) 7  
(c) 10

24  
4  
40  
400
25. \(2 \div 6 \quad \) Quotient: 34  
Remainder: 0

3. \(3 \div 8 \quad \) Quotient: 28  
Remainder: 2

4. \(4 \div 7 \quad \) Quotient: 18  
Remainder: 2

5. \(5 \div 9 \quad \) Quotient: 19  
Remainder: 0

26. 18
13 R 2
400

27. 238 R 2
88
249 R 3

28. \(254 \div 4, 54 \div 2, 299 \div 4, 438 \div 5, 203 \div 3\)

29. 11 months

30. $93

31. 126 white peaches

32. $435

33. (a) 10  
(b) 1  
(c) chocolate  
(d) 19  
(e) coconut & peanut butter  
(f) other

34. (a) Flower Park & Aqua Park  
(b) Pumpkin Park  
(c)

<table>
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<td>950</td>
<td>65</td>
</tr>
<tr>
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<td>90</td>
<td>20</td>
</tr>
<tr>
<td>Snow Park</td>
<td>375</td>
<td>100</td>
<td>800</td>
</tr>
</tbody>
</table>

(d) 1,640  
(e) Aqua Park  
(f) 325