math Antics
Exercises

Name:

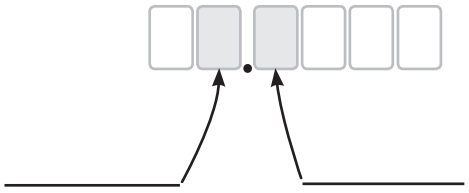
Date:

Decimal Place Value

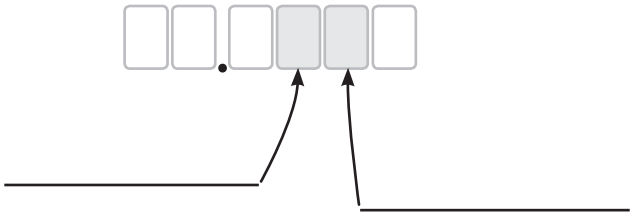
1 Fill in the blank.

The symbol that seperates the whole number places from the decimal places is called the _____ .

2 Name the number places:



3 Name the number places:



4 What is the place value of the digit '3' in this number?

1.375

5 What is the place value of the digit '7' in this number?

25.07

6 What is the place value of the digit '8' in this number?

0.2489

7 Write this number in expanded form:

25.36

8 Write this number in expanded form:

7.425

math Antics
Exercises

Name:

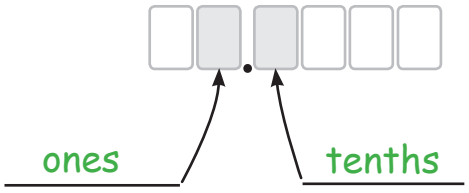
Date:

Decimal Place Value

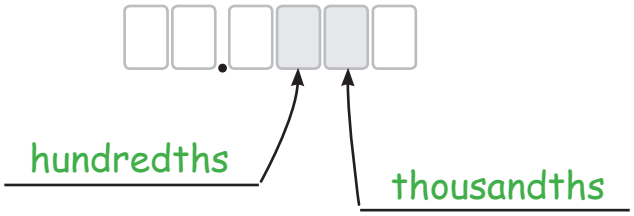
1 Fill in the blank.

The symbol that seperates the whole number places from the decimal places is called the decimal point .

2 Name the number places:



3 Name the number places:



4 What is the place value of the digit '3' in this number?

1.375

because the 3 is in the 'tenths place'
it represents three tenths (3 × 1/10)
so its place value is:

$\frac{3}{10}$

5 What is the place value of the digit '7' in this number?

25.07

because the 7 is in the 'hundredths place'
it represents seven hundredths (7 × 1/100)
so its place value is:

$\frac{7}{100}$

6 What is the place value of the digit '8' in this number?

0.2489

because the 8 is in the 'thousandths place'
it represents eight thousandths (8 × 1/1000)
so its place value is:

$\frac{8}{1000}$

7 Write this number in expanded form:

25.36

$20 + 5 + \frac{3}{10} + \frac{6}{100}$

8 Write this number in expanded form:

7.425

$7 + \frac{4}{10} + \frac{2}{100} + \frac{5}{1000}$

See Video for step-by-step solutions to each problem.

math Antics Worksheets

Name: _____

Date: _____

Identifying Decimal Number Places

NS-DPV 1

Instructions: Use your knowledge of number place names to identify the digits asked for in each problem below.

1. 34.285

   What digit is in the tens place? 3

   What digit is in the tenths place? 2

2. 1.067

   What digit is in the tenths place? _____

   What digit is in the hundredths place? _____

3. 410.528

   What digit is in the tenths place? _____

   What digit is in the thousandths place? _____

4. 3.74195

   What digit is in the hundredths place? _____

   What digit is in the ten-thousandths place? _____

5. 52.37486

   What digit is in the tenths place? _____

   What digit is in the hundred-thousandths place? _____

6. 196.7258

   What digit is in the hundreds place? _____

   What digit is in the hundredths place? _____

7. 7.439185

   What digit is in the ones place? _____

   What digit is in the millionths place? _____

math Antics Worksheets

Name:

Date:

Invisible Decimal Number Places

NS-DPV 2

Instructions: Number places are usually invisible, so you need to be able to identify the digits they contain even when they are not shown. For each multi-digit number below, circle the digit that is in the number place listed.

1. tenths place
   42.35
2. thousandths place
   521.849
3. ones place
   43.20675
4. hundreds place
   8,461.250
5. hundredth place
   789.520
6. tens place
   12.059438
7. tenths place
   745.6
8. ten-thousandths place
   54.16925
9. hundreds place
   2,310.5794
10. millionths place
    843.010854
11. hundredths place
    6,351.33
12. hundred-thousandths place
    5,106.3007824
13. thousandths place
    1.15627886
14. ones place
    42.626
15. thousands place
    9,426.37294218
16. tenths place
    3.63280207

math Antics Worksheets

Name:

Date:

Place Value with Decimals

NS-DPV 3

Instructions: Remember that a digit's place determines its value as you answer the questions below.

1. What is the place value of the digit '2' in this number?

   16.275 — $\frac{2}{10}$

2. What is the place value of the digit '4' in this number?

   3.141 — $\frac{4}{100}$

3. What is the place value of the digit '9' in this number?

   350.97 — _____

4. What is the place value of the digit '7' in this number?

   75.8 — _____

5. What is the place value of the digit '1' in this number?

   0.73194 — _____

6. What is the place value of the digit '8' in this number?

   5.2814 — _____

7. What is the place value of the digit '3' in this number?

   1,350.76 — _____

8. What is the place value of the digit '7' in this number?

   50.328716 — _____

9. What is the place value of the digit '5' in this number?

   24.5003 — _____

10. What is the place value of the digit '9' in this number?

    9,342.12 — _____

11. What is the place value of the digit '4' in this number?

    10.0472 — _____

12. What is the place value of the digit '5' in this number?

    12.938657 — _____

13. What is the place value of the digit '8' in this number?

    178.53 — _____

14. What is the place value of the digit '6' in this number?

    29.168 — _____

math Antics® Worksheets

Name: _____

Date: _____

Expanded Form with Decimals

NS-DPV 4

Instructions: Use what you learned in the video to write these numbers in expanded form.

1. 153.427 $100 + 50 + 3 + \frac{4}{10} + \frac{2}{100} + \frac{7}{1{,}000}$
2. 24.75 _____
3. 5.609 _____
4. 0.1234 _____
5. 5,822.3 _____
6. 39.054 _____
7. 604.855 _____
8. 9.83924 _____
9. 0.202 _____
10. 550.346 _____
11. 0.05203 _____
12. 473.625 _____

math Antics Worksheets

Name: _____

Date: _____

Identifying Decimal Number Places

NS-DPV 1

Instructions: Use your knowledge of number place names to identify the digits asked for in each problem below.

1. 34.285
   - What digit is in the tens place? 3
   - What digit is in the tenths place? 2

2. 1.067
   - What digit is in the tenths place? 0
   - What digit is in the hundredths place? 6

3. 410.528
   - What digit is in the tenths place? 5
   - What digit is in the thousandths place? 8

4. 3.74195
   - What digit is in the hundredths place? 4
   - What digit is in the ten-thousandths place? 9

5. 52.37486
   - What digit is in the tenths place? 3
   - What digit is in the hundred-thousandths place? 6

6. 196.7258
   - What digit is in the hundreds place? 1
   - What digit is in the hundredths place? 2

7. 7.439185
   - What digit is in the ones place? 7
   - What digit is in the millionths place? 5

math Antics Worksheets

Name:

Date:

Invisible Decimal Number Places

NS-DPV 2

Instructions: Number places are usually invisible, so you need to be able to identify the digits they contain even when they are not shown. For each multi-digit number below, circle the digit that is in the number place listed.

1. tenths place
   42.35
2. thousandths place
   521.849
3. ones place
   43.20675
4. hundreds place
   8,461.250
5. hundredth place
   789.520
6. tens place
   12.059438
7. tenths place
   745.6
8. ten-thousandths place
   54.16925
9. hundreds place
   2,310.5794
10. millionths place
    843.010854
11. hundredths place
    6,351.33
12. hundred-thousandths place
    5,106.300782 4
13. thousandths place
    1.156 27886
14. ones place
    42.626
15. thousands place
    9,426.37294218
16. tenths place
    3.63280207

math Antics Worksheets

Name:

Date:

Place Value with Decimals

NS-DPV 3

Instructions: Remember that a digit's place determines its value as you answer the questions below.

1. What is the place value of the digit '2' in this number?
   16.275 — 2/10

2. What is the place value of the digit '4' in this number?
   3.141 — 4/100

3. What is the place value of the digit '9' in this number?
   350.97 — 9/10

4. What is the place value of the digit '7' in this number?
   75.8 — 70

5. What is the place value of the digit '1' in this number?
   0.73194 — 1/1,000

6. What is the place value of the digit '8' in this number?
   5.2814 — 8/100

7. What is the place value of the digit '3' in this number?
   1,350.76 — 300

8. What is the place value of the digit '7' in this number?
   50.328716 — 7/10,000

9. What is the place value of the digit '5' in this number?
   24.5003 — 5/10

10. What is the place value of the digit '9' in this number?
    9,342.12 — 9,000

11. What is the place value of the digit '4' in this number?
    10.0472 — 4/100

12. What is the place value of the digit '5' in this number?
    12.938657 — 5/100,000

13. What is the place value of the digit '8' in this number?
    178.53 — 8

14. What is the place value of the digit '6' in this number?
    29.168 — 6/100

math Antics Worksheets

Name:

Date:

Expanded Form with Decimals

NS-DPV 4

Instructions: Use what you learned in the video to write these numbers in expanded form.

1. 153.427 — $100 + 50 + 3 + \frac{4}{10} + \frac{2}{100} + \frac{7}{1,000}$
2. 24.75 — $20 + 4 + \frac{7}{10} + \frac{5}{100}$
3. 5.609 — $5 + \frac{6}{10} + \frac{9}{1,000}$
4. 0.1234 — $\frac{1}{10} + \frac{2}{100} + \frac{3}{1,000} + \frac{4}{10,000}$
5. 5,822.3 — $5,000 + 800 + 20 + 2 + \frac{3}{10}$
6. 39.054 — $30 + 9 + \frac{5}{100} + \frac{4}{1,000}$
7. 604.855 — $600 + 4 + \frac{8}{10} + \frac{5}{100} + \frac{5}{1,000}$
8. 9.83924 — $9 + \frac{8}{10} + \frac{3}{100} + \frac{9}{1,000} + \frac{2}{10,000} + \frac{4}{100,000}$
9. 0.202 — $\frac{2}{10} + \frac{2}{1,000}$
10. 550.346 — $500 + 50 + \frac{3}{10} + \frac{4}{100} + \frac{6}{1,000}$
11. 0.05203 — $\frac{5}{100} + \frac{2}{1,000} + \frac{3}{100,000}$
12. 473.625 — $400 + 70 + 3 + \frac{6}{10} + \frac{2}{100} + \frac{5}{1,000}$