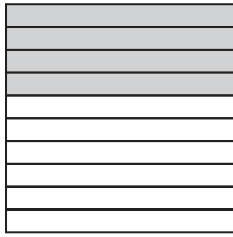# CHAPTER 7 Decimals

Lesson 7.1   Understanding Tenths

Write the decimals that the shaded and unshaded parts represent.
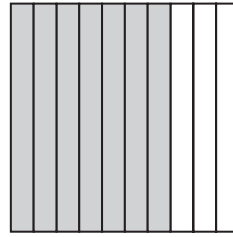
1.

shaded parts: _____

unshaded parts: _____
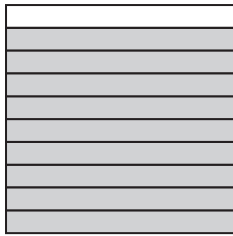
2.

shaded parts: _____

unshaded parts: _____

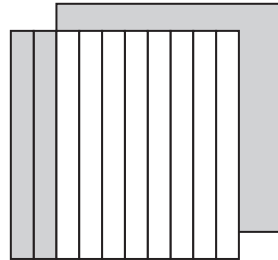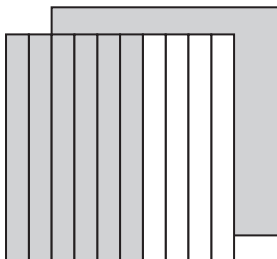**3.**

shaded parts: _____

unshaded parts: _____

4.

shaded parts: _____

unshaded parts: _____

5.

shaded parts: _____

unshaded parts: _____

6.

shaded parts: _____

unshaded parts: _____

Write a decimal for each place-value chart.

7.

Ones	Tenths
	○ ○ ○ ○ ○
	○ ○ ○ ○

_____

8.

Ones	Tenths
○ ○ ○	○ ○

_____

Write the correct decimal in each box.

9.

10.
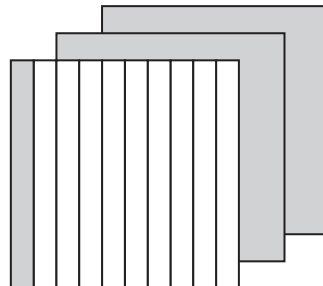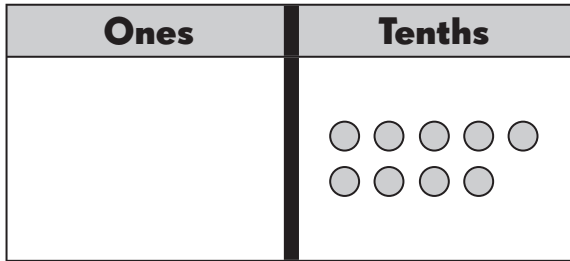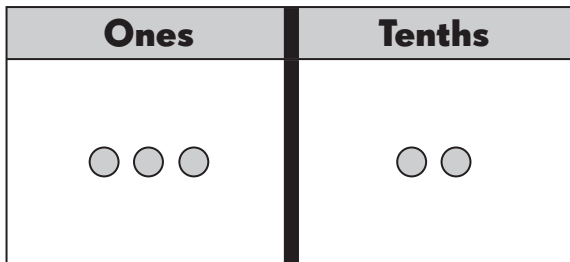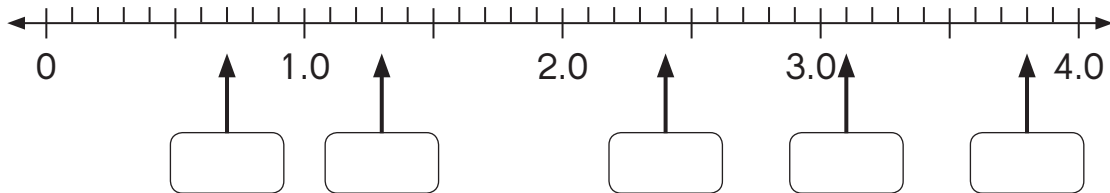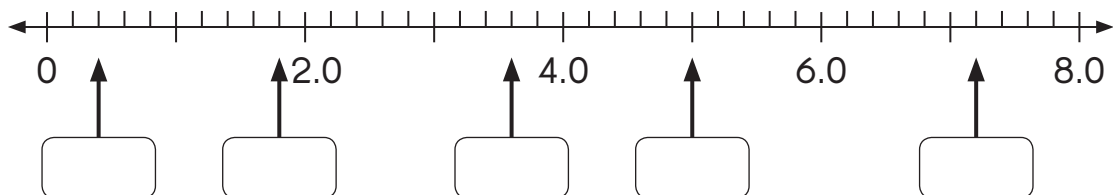
Write each of these as a decimal.

11. 4 tenths = _____

12. 25 tenths = _____

13. 68 tenths = _____

14. 176 tenths = _____

15. 3 ones and 9 tenths = _____

16. 40 ones and 2 tenths = _____

Write each fraction or mixed number as a decimal.

17. $\dfrac{6}{10}$ = _____

18. $\dfrac{9}{10}$ = _____

19. $4\dfrac{8}{10}$ = _____

20. $7\dfrac{2}{10}$ = _____

21. $16\dfrac{1}{10}$ = _____

22. $44\dfrac{5}{10}$ = _____

23. $\dfrac{63}{10}$ = _____

24. $\dfrac{50}{10}$ = _____

25. $\dfrac{210}{10}$ = _____

26. $\dfrac{201}{10}$ = _____

27. $\dfrac{300}{10}$ = _____

28. $\dfrac{330}{10}$ = _____

Write each number as a fraction and as a decimal.
Complete the table.

	Number of Tenths	Fraction	Decimal
29.	6 tenths		
30.	19 tenths		
31.	57 tenths		
32.	124 tenths		
33.	203 tenths		
34.	455 tenths		

Write a fraction and a decimal for each measure.

35. Length of paper clip = [ ] cm

= [ ] cm
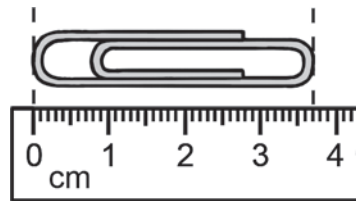
36. Weight of pumpkin = [ ] lb

= [ ] lb
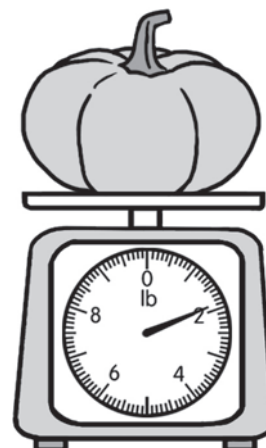
Name: _____   **Date:** _____

Write a fraction and a decimal for the measure.

37. Volume of water = [ ] L

= [ ] L
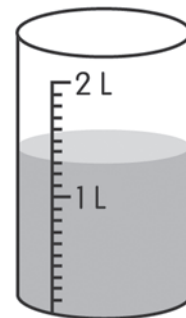
Fill in the blanks.

38. 8.9 = 8 ones and _____ tenths

39. 16.4 = 1 ten _____ ones and 4 tenths

40. 37.2 = 3 tens 7 ones and _____ tenths

41. 58.6 = _____ tens 8 ones and 6 tenths

42. 90.5 = _____ tens _____ ones and 5 tenths

15.2 can be written as $10 + 5 + \frac{2}{10}$. Complete in the same way.

43. 5.2 = [ ] + [ ]

44. 16.3 = [ ] + [ ] + [ ]

14.3 can be written as $10 + 4 + 0.3$. Complete in the same way.

45. 8.4 = [ ] + [ ]

46. 70.9 = [ ] + [ ] + [ ]

Fill in the blanks.

47.

Tens	Ones	Tenths
2	4	7

The digit 7 is in the _____ place. Its value is _____.

48.

Tens	Ones	Tenths
3	8	5

The digit 8 is in the _____ place. Its value is _____.

49.

Tens	Ones	Tenths
6	0	9

The digit _____ is in the tens place. Its value is _____.

50.

Tens	Ones	Tenths
8	1	4

The digit _____ is in the tenths place. Its value is _____.

Lesson 7.2   Understanding Hundredths

Write the decimals that the shaded and unshaded parts represent.

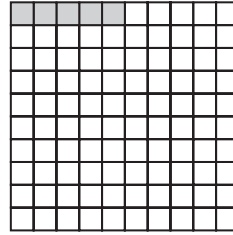**1.**

shaded parts: _____

unshaded parts: _____

2.

shaded parts: _____

unshaded parts: _____

3.

shaded parts: _____

unshaded parts: _____

4.

shaded parts: _____

unshaded parts: _____

5.

shaded parts: _____

unshaded parts: _____

6.
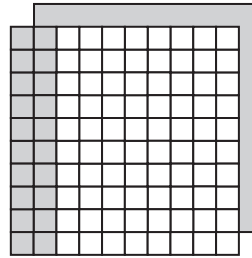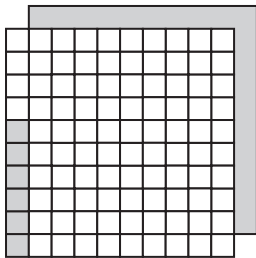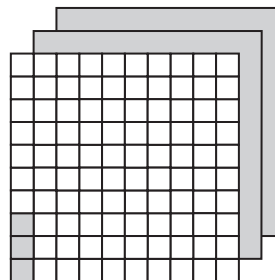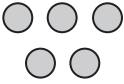
shaded parts: _____

unshaded parts: _____
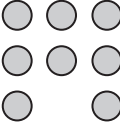
Write a decimal for each place-value chart.

7.

Ones	Tenths	Hundredths
	○ ○ ○ ○ ○	○ ○ ○

_____

8.

Ones	Tenths	Hundredths
○ ○ ○		○ ○ ○ ○ ○ ○ ○ ○

_____

Write the correct decimal in each box.

9.

10.
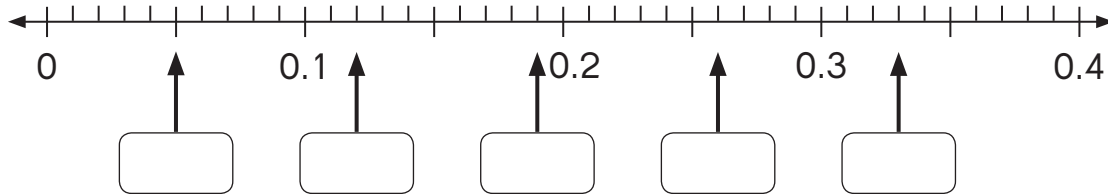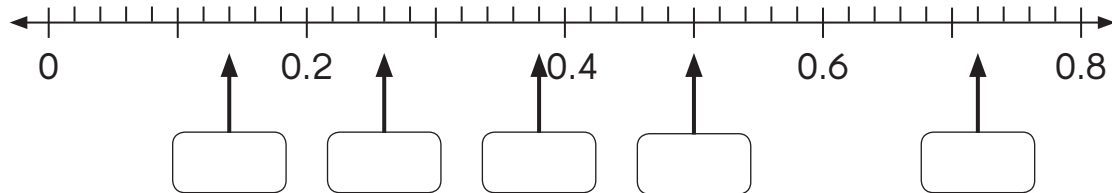
Write each of these as a decimal.

11. 9 hundredths = _____   **12.** 10 hundredths = _____

13. 35 hundredths = _____   **14.** 206 hundredths = _____

15. 8 tenths 6 hundredths = _____

16. 41 ones and 3 hundredths = _____

17. 50 ones and 22 hundredths = _____

Write each fraction or mixed number as a decimal.

18. $\dfrac{4}{100}$ = _____   **19.** $\dfrac{19}{100}$ = _____

20. $\dfrac{65}{100}$ = _____   **21.** $\dfrac{80}{100}$ = _____

22. $2\dfrac{14}{100}$ = _____   **23.** $15\dfrac{3}{100}$ = _____

24. $30\dfrac{8}{100}$ = _____   **25.** $\dfrac{169}{100}$ = _____

26. $\dfrac{202}{100}$ = _____   **27.** $\dfrac{250}{100}$ = _____

Write each decimal in hundredths.

28. 0.08 = _____ hundredths   **29.** 0.25 = _____ hundredths

30. 0.40 = _____ hundredths   **31.** 6.07 = _____ hundredths

32. 5.39 = _____ hundredths   **33.** 9.80 = _____ hundredths

Write each number as a fraction and as a decimal.
Complete the table.

	Number of Hundredths	Fraction	Decimal
34.	1 hundredth		
35.	6 hundredths		
36.	9 hundredths		
37.	13 hundredths		
38.	59 hundredths		
39.	106 hundredths		

Fill in the blanks.

40. $0.75 =$ _____ tenths _____ hundredths

41. $3.46 = 3$ _____ and 4 tenths _____ hundredths

42. $5.08 = 5$ ones and _____ hundredths

43. $6.23 =$ _____ ones and _____ tenths _____ hundredths

44. $9.50 =$ _____ ones and _____ tenths _____ hundredths

6.13 can be written as $6 + \dfrac{1}{10} + \dfrac{3}{100}$. Complete in the same way.

45.   1.56 = ⬜ + ⬜ + ⬜

46.   24.07 = ⬜ + ⬜ + ⬜ + ⬜

7.45 can be written as $7 + 0.4 + 0.05$. Complete in the same way.

47.   3.89 = ⬜ + ⬜ + ⬜

48.   51.52 = ⬜ + ⬜ + ⬜ + ⬜

Fill in the blanks.

49.

Ones	Tenths	Hundredths
4	8	3

The digit 3 is in the _____ place. Its value is _____.

50.

Ones	Tenths	Hundredths
7	0	9

The digit 0 is in the _____ place. Its value is _____.

51.

Tens	Ones		Tenths	Hundredths
6	1	•	5	5

The digit _____ is in the tens place. Its value is _____.

52.

Tens	Ones		Tenths	Hundredths
3	4	•	0	2

The digit _____ is in the hundredths place. Its value is _____.

Write each amount in decimal form.

53.   35 cents = $_____

54.   70 cents = $_____

55.   108 cents = $_____

56.   240 cents = $_____

57.   6 dollars 35 cents = $_____

58.   9 dollars 5 cents = $_____

Lesson 7.3   Comparing Decimals (Part 1)

Use the number line. Find the number that is

◄—┼———┼———┼———┼———┼———┼———┼———┼———┼———┼———┼—►
1.0   1.1   1.2   1.3   1.4   1.5   1.6   1.7   1.8   1.9   2.0
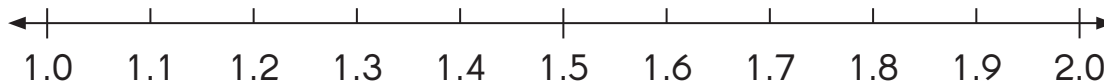
1.   0.1 more than 1.9.   _____

2.   0.3 more than 1.1.   _____

3.   0.5 more than 1.4.   _____

4.   0.4 less than 1.6.   _____

5.   0.2 less than 1.8.   _____

Use the number line. Find the number that is

◄—┼———┼———┼———┼———┼———┼———┼———┼———┼———┼———┼—►
1.20 1.21 1.22 1.23 1.24 1.25 1.26 1.27 1.28 1.29 1.30
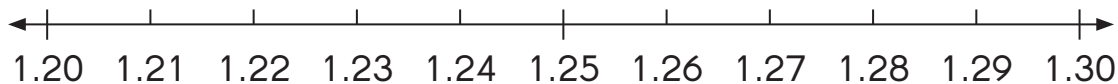
6.   0.01 more than 1.26.   _____

7.   0.02 more than 1.23.   _____

8.   0.05 more than 1.24.   _____

9.   0.03 less than 1.26.   _____

10. 0.04 less than 1.25.   _____

Continue the number patterns.
Use the number line to help you.

11.

1.02   1.04   1.06   ?   ?   1.12   1.14   1.16

1.02   1.04   1.06   _____   _____

12.

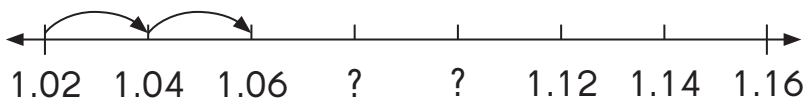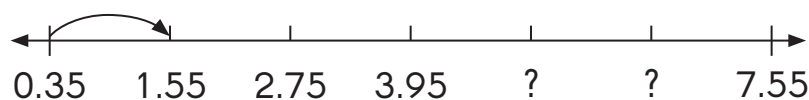0.35   1.55   2.75   3.95   ?   ?   7.55

0.35   1.55   2.75   3.95   _____   _____

13.

5.92   5.60   5.28   ?   ?   4.32   4.00
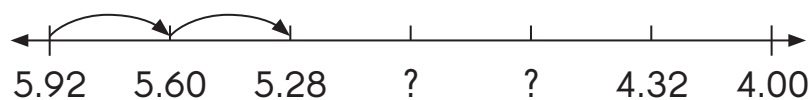
5.92   5.60   5.28   _____   _____

14.

7.95   6.75   5.55   ?   ?   1.95   0.75
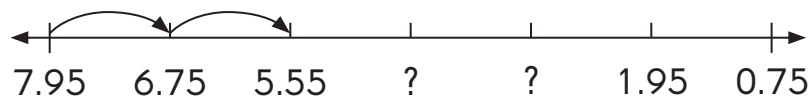
7.95   6.75   5.55   _____   _____

15.
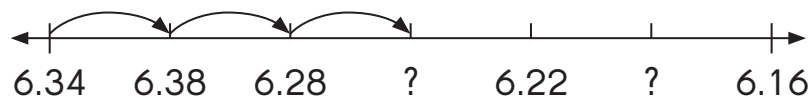
6.34   6.38   6.28   ?   6.22   ?   6.16

6.34   6.38   6.28   _____   6.22   _____   6.16

Lesson 7.3   Comparing Decimals (Part 2)

Compare the two decimals in each table. Then fill in the blanks.

1.

Ones	Tenths	Hundredths
2	0	3
2	0	6

_____ is greater than _____.

2.

Ones	Tenths	Hundredths
0	3	5
0	3	2

_____ is less than _____.

3.

Ones	Tenths	Hundredths
8	2	3
8	3	2

_____ is greater than _____.

4.

Ones	Tenths	Hundredths
0	0	9
0	9	0

_____ is less than _____.

Compare. Write < or >.

5. 0.58 ◯ 0.85   **6.** 0.07 ◯ 0.09

7. 3.36 ◯ 3.63   **8.** 2.10 ◯ 2.01

Circle the greatest decimal and underline the least.

9. 0.45   0.15   0.54

10. 7.68   7.86   6.78

Write the decimals in order from least to greatest.

11. 0.86   0.82   0.68 _____ _____ _____

12. 0.98   0.99   0.89 _____ _____ _____

13. 0.75   0.57   0.70 _____ _____ _____

14. 5.46   6.54   5.64 _____ _____ _____

Write the decimals in order from greatest to least.

15. 0.10   0.09   0.07 _____ _____ _____

16. 0.99   0.09   0.90 _____ _____ _____

17. 0.38   0.83   3.08 _____ _____ _____

18. 8.49   9.48   8.94 _____ _____ _____
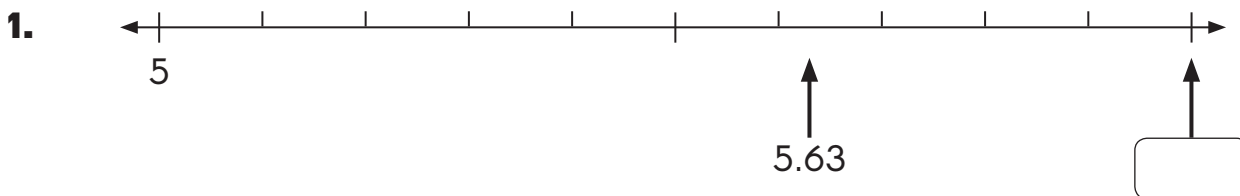
Lesson 7.4   Rounding Decimals (Part 1)

Fill in the missing number in each box.
Then round each decimal to the nearest whole number.

1.

5.63 rounded to the nearest whole number is _____.

2.
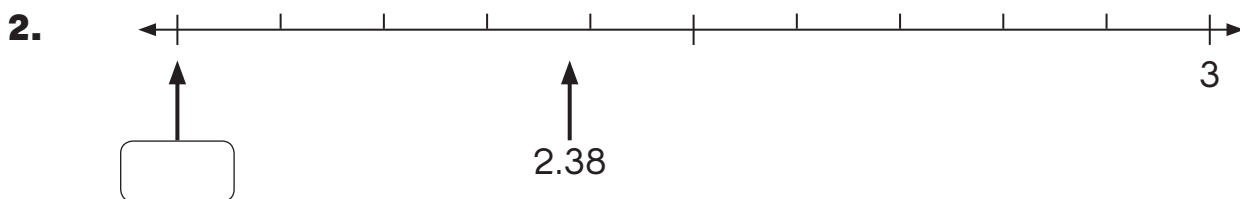
2.38 rounded to the nearest whole number is _____.

Round each measure.

3.

Round the height of the cabinet to the nearest centimeter.

_____ centimeters is about _____ centimeters.

4.
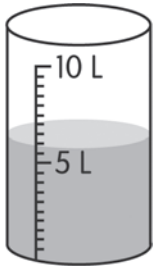
Round the amount of water to the nearest liter.

_____ liters is about _____ liters.

5.

Round the weight of the grapes to the nearest pound.

_____ pounds is about _____ pounds.

6.

Round the length of the road to the nearest kilometer.

_____ kilometers is about _____ kilometers.

7.

Round the price of the sneakers to the nearest dollar.

$_____ is about _____ dollars.
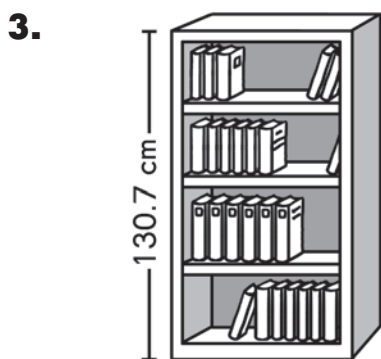
Lesson 7.4   Rounding Decimals (Part 2)

Fill in the missing number in each box. Then round each decimal to the nearest tenth.

1.

3.0

3.08

3.08 rounded to the nearest tenth is _____.

2.

13.2
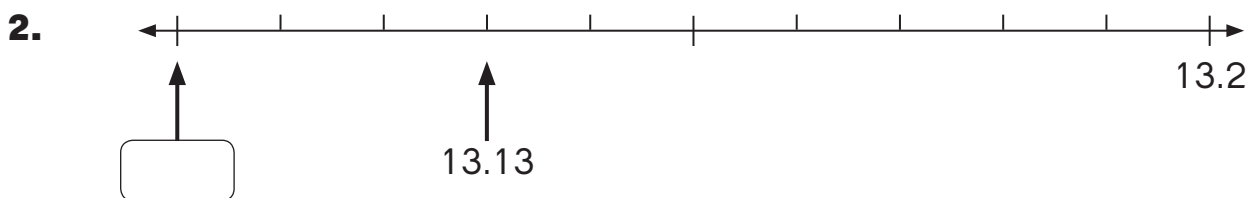
13.13

13.13 rounded to the nearest tenth is _____.

Round each measure.

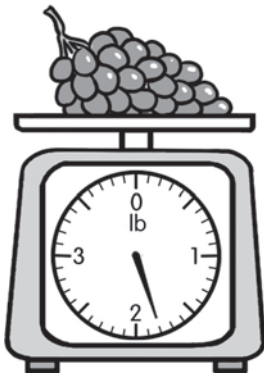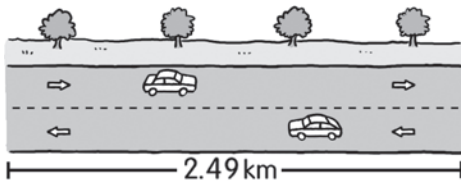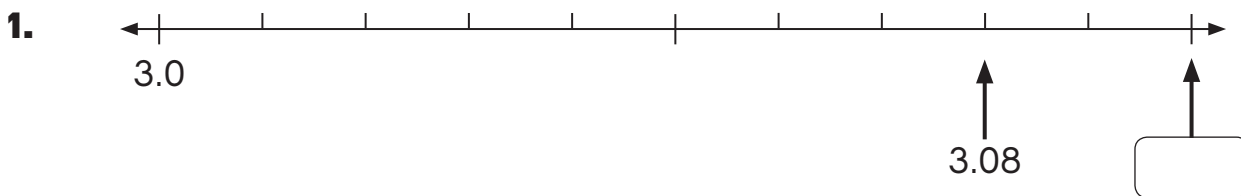**3.**   The weight of a kitten is 2.05 pounds.
Round the weight of the kitten to the nearest tenth of a pound.

2.05 pounds is about _____ pounds.

4.   The length of a bed is 1.34 meters.
Round the length of the bed to the nearest tenth of a meter.

_____ meters is about _____ meters.

5.   Cedar Highway is 15.59 kilometers long.
Round the length of the highway to the nearest tenth of a kilometer.

_____ kilometers is about _____ kilometers.

6. The volume of water in a jug is 3.46 liters.
Round the volume of water to the nearest liter.

_____ liters is about _____ liters.

7. Jason's weight is 96.52 pounds.
Round Jason's weight to the nearest pound.

_____ pounds is about _____ pounds.

Round each decimal to the nearest whole number and then to the nearest tenth.

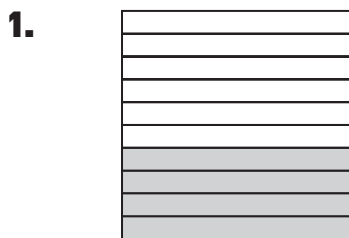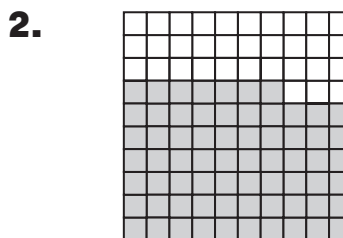|	Decimal	Rounded to the nearest	
		Whole Number	Tenth
8.	0.67		
9.	1.28		
10.	3.06		
11.	8.73		
12.	19.45		
13.	23.99		
14.	36.24		
15.	41.99		

Lesson 7.5   Fractions and Decimals

Write each fraction or mixed number as a decimal.

1.

$$\frac{4}{10} = \underline{\hspace{3cm}}$$

2.

$$\frac{67}{100} = \underline{\hspace{3cm}}$$

3. $\frac{3}{10} = \underline{\hspace{2.5cm}}$

4. $\frac{49}{100} = \underline{\hspace{2.5cm}}$

5. $5\frac{9}{10} = \underline{\hspace{2.5cm}}$

6. $8\frac{79}{100} = \underline{\hspace{2.5cm}}$

Write each fraction or mixed number as a decimal.
Hint: Make the denominator 10 or 100.

7. $\frac{1}{5} = \frac{\boxed{}}{10} = \underline{\hspace{3cm}}$

8. $\frac{19}{50} = \frac{\boxed{}}{100} = \underline{\hspace{3cm}}$

9. $\frac{4}{5} = \underline{\hspace{2.5cm}}$

10. $\frac{1}{2} = \underline{\hspace{2.5cm}}$

Write each fraction or mixed number as a decimal.
Hint: Make the denominator 10 or 100.

11. $\dfrac{7}{4} =$ _____

12. $\dfrac{6}{20} =$ _____

13. $\dfrac{16}{25} =$ _____

14. $7\dfrac{1}{5} =$ _____

Write each decimal as a fraction or mixed number in simplest form.

15. $0.6 =$ _____

16. $5.7 =$ _____

17. $1.45 =$ _____

18. $3.36 =$ _____

Put on Your Thinking Cap!

Mark an X to show where each decimal is located on the number line.

1.   3.0

```
←—+———+———+———+———+———+———+———→
   0    0.5   1.0   1.5
```

2.   0.24

```
←—+———+———+———+———+———+———+———→
   0    0.06  0.12
```
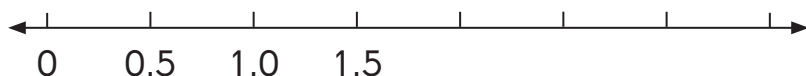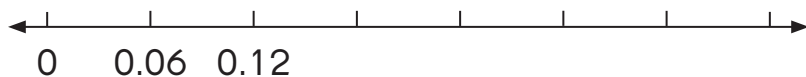
Write any number that is

3.   greater than 5.3 but less than 5.4.   _____

4.   greater than 0.4 but less than 0.5.   _____

5.   greater than 3.85 but less than 3.95.   _____

Answer the questions.

6.   How many tenths are in 8.32? _____ tenths

7.   How many tenths are in 25.80? _____ tenths

8.   How many tenths are in 37.00? _____ tenths

9.   How many hundredths are in 0.56? _____ hundredths

Answer the questions.

10. How many hundredths are in 1.82? _____ hundredths

11. How many hundredths are in 3.94? _____ hundredths

12. Round 8.99 to the nearest

   a. whole number.   _____

   b. tenth.   _____

Continue the number patterns.

13. 1.98   4.18   6.38   8.58   10.78   _____

14. 1.8   1.76   1.72   1.68   1.64   _____

15. 1.2   1.7   2.7   4.2   6.2   _____

16. 3.7   3.5   3.1   2.5   1.7   _____

17. 1.68   1.69   1.70   1.68   1.66   1.67   _____

18. 4.92   4.62   4.02   3.12   1.92   _____

19. 6.38   5.98   7.38   6.58   9.38   8.18   _____