

Use the rate formula to solve these problems.

Rate	Time	Distance traveled
1) 50 m/hr	5 hours	_____
2) 15 m/hr	3 hours	_____
3) 75 m/hr	2 hours	_____
4) 1,484 m/sec	312 seconds	_____

Math Unit # 85 Mastery Score: 4 Minimum Score: 3 Score _____

Solve the following problems.

- | | |
|--------------------------------------|-------------|
| 1) $12x - 17 = 28$ | $x =$ _____ |
| 2) $\frac{1}{5}x + 25 = 50$ | $x =$ _____ |
| 3) $12x + 24 = 97 + 8x$ | $x =$ _____ |
| 4) $x - 17 = 21$ | $x =$ _____ |
| 5) $x + 2\frac{1}{4} = 8\frac{1}{3}$ | $x =$ _____ |
| 6) $29x = 330 - x$ | $x =$ _____ |

Math Unit # 86 Mastery Score 6 Minimum Score 4 Score _____

Write the equations and solve.

The difference between a number and fifteen is six.

1) _____ 2) $x =$ _____

Three times a number plus eighteen equals sixty.

3) _____ 4) $x =$ _____

Change the subject of these formulas to the subject indicated.

$$v = lwh$$

$$5) w = \underline{\hspace{2cm}}$$

$$c = (\pi) d$$

$$6) d = \underline{\hspace{2cm}}$$

$$A = lw$$

$$7) l = \underline{\hspace{2cm}} \quad 8) w = \underline{\hspace{2cm}}$$

Math Unit # 87
Mastery Score 8
Minimum Score 5
Score _____

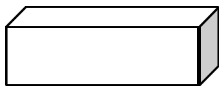
Write the correct formula.

1) Formula for calculating the area of a triangle. _____

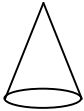
2) Formula for calculating the volume of a triangle. _____

3) Formula for calculating the volume of a sphere. _____

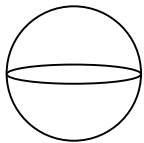
Name the following prisms.



4) _____



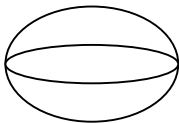
5) _____



6) _____

Calculate the volume of the following problems.

What is the volume of the following sphere?



Diameter = 16

7) _____ cubic units.

What is the volume of a rectangular prism 100 units long, 50 units wide and 200 units high?

8) _____ cubic units.

Math Unit # 88
Mastery Score 8
Minimum Score 5
Score _____

Calculate the prime factors of the following numbers.

26 1) _____ 84 2) _____ 63 3) _____

Find the Lowest Common Denominator.

4) $\frac{3}{4}, \frac{5}{7}$ _____ LCD

5) $\frac{3}{9}, \frac{14}{27}$ _____ LCD

6) $\frac{7}{8}, \frac{16}{14}$ _____ LCD

7) $\frac{7}{12}, \frac{4}{16}$ _____ LCD

Simplify

8) $15/18 =$ _____

Find the quotient.

9) $2,516 \div 34 =$ _____

Find the product.

10) 4.001
 $\times .09$

Math Unit # 89 Mastery Score : 10 Minimum Score 7 Score _____
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Answer the following.

1) $\sqrt{y^2} =$ _____

2) $\sqrt{81} =$ _____

3) $\sqrt{49} =$ _____

4) $6^2 =$ _____

5) $12^2 =$ _____

Solve the following problems.

Balance	Monthly Payment	Rate	Interest Payment	Principal Payment	Principal Balance
5,100.00	76.08	8%	1)	2)	3)
14,000.00	212.98	7 ½ %	4)	5)	6)

Find the current yield to the nearest .1%.

Consider all bonds as \$1,000.00 bonds.

7) J.C. Penny	5 _s	89	101	_____
8) Shell Oil	4 ½ _s	92	102½	_____

Math Unit # 92
 Mastery Score 8
 Minimum Score 6
 Score _____

Show the tax rate as a percent.

- 1) 46.20 per \$1,000.00 _____
- 2) 187 mils per \$1.00 _____
- 3) 8.45 per \$100.00 _____

Find the Tax.

Assessed

Property Value	Tax Rate	Tax Due
4) \$15,720.00	\$4.00 per \$100.00	_____
5) \$18,200.00	\$3.60 per \$100.00	_____

Math Unit # 93
 Mastery Score 5
 Minimum Score 4
 Score _____

Calculate the monthly premiums multiplying by .089.

Annual Premium	Premium
1) \$210.00	_____
2) \$140.00	_____
3) \$90.00	_____

Using the chart below, calculate the annual premiums.

Flood Insurance				
Rate per \$100.00 per year				
Town Class	Brick Homes		Frame Homes	
	House	Contents	House	Contents
1	.159	.224	.204	.271
2	.164	.231	.209	.277
3	.170	.238	.213	.281
4	.178	.244	.216	.285
5	.182	.251	.221	.290

Town Class	Type	House Insurance	Content Insurance	House Premium	Content Premium	Total Premium
2	B	\$44,100.00	\$14,000.00	4)	5)	6)
4	B	\$38,500.00	\$8,000.00	7)	8)	9)
1	F	\$41,400.00	\$9,600.00	10)	11)	12)

Math Unit # 94
 Mastery Score: 12
 Minimum Score: 10
 Score _____

Write the correct definition.

- 1) deci _____
- 2) milli _____
- 3) deka _____
- 4) hecto _____

Write the correct answer. Round to 2 decimal places when necessary.

1) 48 oz = _____ ml

6) 12 lb = _____ kg

7) 2.5 m = _____ cm

Math Unit # 95 Mastery Score: 7 Minimum Score: 5 Score _____

Solve the following.

$$\begin{array}{r} 1) + 18.92 \\ - 22.33 \\ + 19.99 \\ + 16.85 \\ \hline \end{array}$$

$$\begin{array}{r} 2) + 201.75 \\ - 412.19 \\ - 108.71 \\ + 189.98 \\ - 200.62 \\ \hline \end{array}$$

$$\begin{array}{r} 3) + 2.449 \\ + 6.748 \\ \hline \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 4) - 2,662 \\ + 1,598 \\ \hline \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 5) + 1.483 \\ - .62 \\ + .08 \\ - 1.11 \\ \hline \end{array}$$

Write the correct symbol.

6) -8 _____ -5

7) -2 _____ 0

8) +3 _____ +2

Write the number.

9) negative twenty-six. _____

10) negative twenty-eight hundredths. _____

Math Unit # 96 Mastery Score: 10 Minimum Score: 8 Score _____
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