

- * Class work: Page 160; 2-8 even, and 9
- * Homework: Page 160-161; 11-20 every third, 22-24 even, 35
- * Read and take notes on pages 162-164
 - + Define area and perimeter
 - + Know how to use formulas for distance, perimeter, and area

F.T. \rightarrow 5, 10, 15, 20 B.T. 10

$+5 \quad +5 = C.D.$
 $5 - 5 = 0$
 $t = 5n + 0$
 $t = 5n$

- * Wednesday, November 2, 2011
- * SW solve problems by using formulas involving distance, perimeter, and area
- * 1. Complete review quiz
- * 2. Review student notes and work through examples involving the formulas for distance, perimeter, and area
- * 3. Complete class work assignment with a partner
- * 4. Begin homework
 - 1) Find Common Difference - Difference between terms
 - 2) First term - Common Difference
 - 3) Write an equation
 $t = C.D.(n) \pm (F.T. - C.D.)$

- * L 3-8 Using Formulas
- * Terms you should have in your notes:
 - + area, perimeter
- * Distance Formula: $d = rt$
 - + d = distance
 - + r = rate - mph
 - + t = time
- * 1. How long does it take a zebra to travel 160 miles at a speed of 40 miles per hour?

$d = 160$ $t = ?$ $\frac{160}{40} = \frac{40t}{40}$ $t = 4$ hours
- * 2. If you travel 135 miles in 3 hours, what is your average speed in miles per hour?

$d = 135$ $r = ?$ $135 = r \cdot 3$
 $r = ?$ $\frac{135}{3} = \frac{r}{3}$ $r = 45$ mph

Measurement of the outside of an object

- * Perimeter: $P = l + l + w + w = P = 2l + 2w$
 - + P = perimeter
 - + l = length
 - + w = width

Unit of measurement in standard form to no power
- * 1. Find the perimeter of a rectangle with length 15 meters and width 10 meters.

$P = ?$ $w = 10$ m $P = 2(15) + 2(10)$ $P = 50$ m
 $l = 15$ m $P = 30 + 20$
- * 2. The perimeter of a rectangle is 26 yards. Its length is 8 yards. Find the width.

$P = 26$ $w = ?$ $26 = 2(8) + 2w$ $2w = 10$
 $l = 8$ $26 = 16 + 2w$ $\frac{2w}{2} = \frac{10}{2}$
 $-16 \quad -16$ $w = 5$ yds
- * 3. Find the perimeter of the rectangle.

20 cm $P = ?$ $P = 2(20) + 2(15)$
 15 cm $l = 20$ cm $P = 40 + 30$
 $w = 15$ cm $P = 70$ cm

Measurement of the Surface

- * Area: $A = l \cdot w$
 - + A = Area
 - + l = length
 - + w = width

Area: unit of measurement is squared $\frac{in^2}{in^2}$
- * 1. Find the area of a rectangle with a length of 14 inches and a width of 12 inches.

$A = ?$ $w = 12$ $A = 14 \cdot 12$ 168 in^2
 $l = 14$ $A = 168$ squared inches
- * 2. The area of a rectangle is 198 square meters. Its width is 11 meters. Find its length.

$A = 198$ $w = 11$ $198 = l \cdot 11$ $l = 18$ m
 $l = ?$ $198 = 11l$
 $\frac{198}{11} = \frac{11l}{11}$
- * 3. Find the area of the rectangle.

20 cm $A = ?$ $A = 15 \cdot 20$
 15 cm $l = 15$ $A = 300 \text{ cm}^2$
 $w = 20$

- * Class work: Page 164; 1-6 all
- * Homework: Page 165; 7-16 every third, 18-26 even
- * Read and take notes on pages 180-182
 - + Define: factors, base, exponent, and power
 - + Include examples of writing and evaluating equations with exponents

- Thursday, November 3, 2011
- SW write and solve problems involving exponents
- 1. Complete review quiz
- 2. Review student notes and work through examples writing and evaluating numeric expressions with variables
- 3. Complete class work assignment with a partner
- 4. Begin homework

Distance $d = rt$ r = rate (speed) t = time	Perimeter $P = 2l + 2w$ l = length w = width Unit of measurement stays the same	Area $A = l \cdot w$ Unit of measurement is square
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- L4-1: Powers and Exponents
- Define in your notes the following terms:
 - Factors
 - Base
 - Power
 - Exponent
- Write expressions using exponents:
 - Steps: 1) Write down the base(s) (# being multiplied)
 - 2) Count # of times base is written this is the exponent
 - 3) Write smaller + at the upper right of the base
- 1. $6 \cdot 6 \cdot 6 \cdot 6 = 6^4$
- 2. $x \cdot x \cdot x \cdot x \cdot x = x^5$

- 3. $(-2)(-2)(-2) = (-2)^3$ IF the base is in () keep the ()
- 4. $9 \cdot f \cdot f \cdot f \cdot f \cdot g = 9^4 f^4 g$
- 5. $(c-d)(c-d) = (c-d)^2$
- 6. $(m+1) = (m+1)^1$

$3^0 = 1 \quad n^0 = 1$

Find the answer

- Evaluate numeric expressions.
 - Steps: 1) Write the base to match the exponent.
 - 2) Multiply

- 1. $5^4 = 5 \cdot 5 \cdot 5 \cdot 5 = 625$
- 2. $5 \cdot 2^4 = 5 \cdot 2 \cdot 2 \cdot 2 \cdot 2 = 80$
- 3. $4^2 = 4 \cdot 4 = 16$
- 4. $3^5 \cdot 10 = 3 \cdot 3 \cdot 3 \cdot 3 \cdot 3 \cdot 10 = 2,430$

$$\begin{array}{r} 5 \\ \cdot 5 \\ \hline 25 \\ \cdot 5 \\ \hline 125 \\ \cdot 5 \\ \hline 625 \end{array}$$

$$\begin{array}{r} 3 \\ \cdot 3 \\ \hline 9 \\ \cdot 3 \\ \hline 27 \\ \cdot 3 \\ \hline 81 \\ \cdot 3 \\ \hline 243 \end{array}$$

- Evaluate each expression if $a = 2$, $b = 4$, and $c = -3$
 - Steps: 1) Rewrite replacing the variable w/ the number
 - 2) Solve
- 1. $c^4 = (-3)(-3)(-3)(-3) = 9 \cdot (-3) = -27(-3) = 81$
- 2. $a^2 + 3a - 1 = 2^2 + 3(2) - 1 = 2 \cdot 2 + 6 - 1 = 4 + 6 - 1 = 10 - 1 = 9$
- 3. $2(3c + 7)^2 = 2(3(-3) + 7)^2 = 2(-9 + 7)^2 = 2(-2)^2 = 2 \cdot (-2) \cdot (-2) = 4 \cdot (-2) = 8$

- Class Work: Page 182; 1-13 all
- Homework: Page 182-183; 16-46 every third, 49-51 all
- Read and take notes on pages 186-188
 - Make sure you define prime and composite number, prime factorization, factor tree, monomial, and factor
 - Include examples of how to factor numbers using a factor tree.



