



SECTION 6

ASSESSMENT REFERENCE MATERIALS

Definitions and Formulas for Basic Skills Mathematics

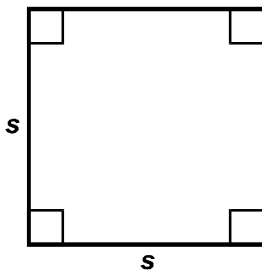
Definitions

$=$ equal to	$\pi \approx 3.14$	\overline{AB} line segment AB
$>$ greater than	\angle angle	AB length of line segment AB
$<$ less than	$m\angle$ measure of angle	$\angle ABC$ angle with vertex B
\geq greater than or equal to	right angle	formed by rays BA and BC
\leq less than or equal to		

Conversions for Units of Measurement

	U.S. Standard	Metric	
Distance	12 inches = 1 foot	1 kilometer = 1000 meters	Time 1 minute = 60 seconds 1 hour = 60 minutes 1 day = 24 hours 1 year = 365 days 1 year = 52 weeks
	3 feet = 1 yard	1 meter = 100 centimeters	
	5280 feet = 1 mile	1 centimeter = 10 millimeters	
	1 inch = 2.54 centimeters		
Volume (liquid)	1 gallon = 4 quarts	1 liter = 1000 milliliters	
	1 quart = 32 ounces	1 cubic centimeter = 1 milliliter	
	1 quart \approx 0.95 liters		
Mass	1 pound = 16 ounces	1 gram = 1000 milligrams	
	1 ton = 2000 pounds	1 kilogram = 1000 grams	
	2.2 pounds \approx 1 kilogram		

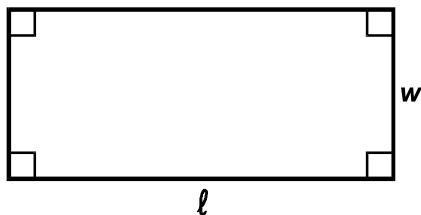
Formulas



Square

Area = s^2

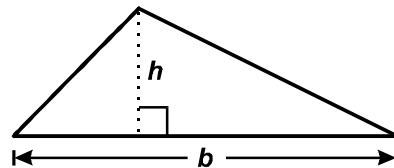
Perimeter = $4s$



Rectangle

Area = lw

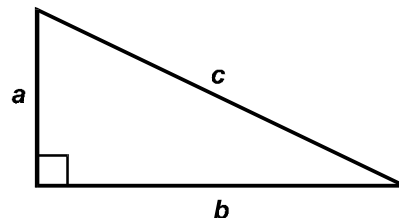
Perimeter = $2l + 2w$



Triangle

Area = $\frac{1}{2}bh$

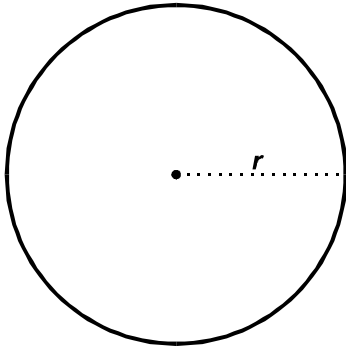
Sum of the interior angles = 180°



Right triangle

Pythagorean formula: $c^2 = a^2 + b^2$

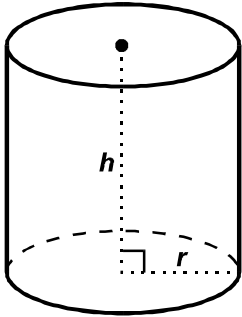
Formulas (continued)

**Circle**

$$\text{Area} = \pi r^2$$

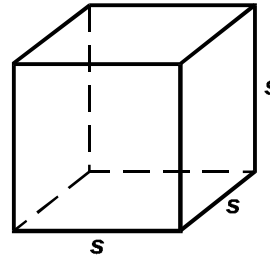
$$\text{Circumference} = 2\pi r$$

$$\text{Diameter} = 2r$$

**Right cylinder**

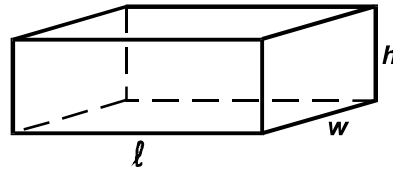
$$\text{Surface area} = 2\pi rh + 2\pi r^2$$

$$\text{Volume} = \pi r^2 h$$

**Cube**

$$\text{Surface area} = 6s^2$$

$$\text{Volume} = s^3$$

**Rectangular solid**

$$\text{Surface area} = 2lw + 2lh + 2wh$$

$$\text{Volume} = lwh$$

End of Definitions and Formulas
