AKSTAR ALASKA SYSTEM OF ACADEMIC READINESS

Grade 8 Mathematics Formula Sheet

Below are formulas you may find useful as you work the problems. However, some of the formulas may not be used. You may refer to this page as you take the test.

Area of a Triangle

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

Area of a Parallelogram

$$A = bh$$

Area of a Circle

$$A = \pi r^2$$

Circumference of a Circle

$$C = \pi d$$
 or $C = 2\pi r$

Volume of a Prism

$$V = Bh$$

Volume of a Cylinder

$$V = \pi r^2 h$$

Volume of a Sphere

$$V = \frac{4}{3}\pi r^3$$

Volume of a Cone

$$V = \frac{1}{3} \pi r^2 h$$

Pythagorean Theorem

$$a^2 + b^2 = c^2$$

Unit Conversions

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$$1 \text{ mile} = 1,760 \text{ yards}$$

$$1 \text{ pound} = 16 \text{ ounces}$$

$$1 \text{ ton} = 2,000 \text{ pounds}$$

$$1 \text{ cup} = 8 \text{ fluid ounces}$$

$$1 \text{ pint} = 2 \text{ cups}$$

$$1 \text{ quart} = 2 \text{ pints}$$

$$1 \text{ gallon} = 4 \text{ quarts}$$