Performance Series Assessment Guidelines
Mathematics 2010-2011

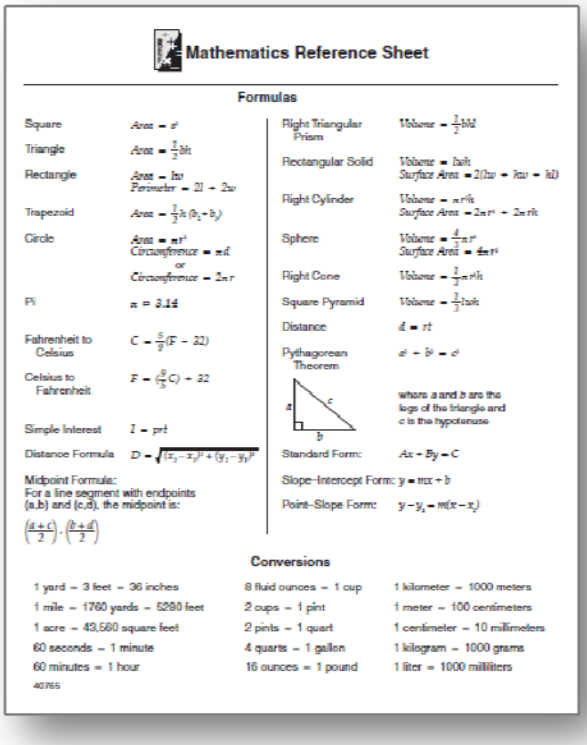
Calculators: (grades 3-5: no / grades 6-8: yes)

District guidelines do not allow calculators to be used at elementary grade levels (grades 3, 4, and 5); however, scratch paper should be allowed during the mathematics assessment in Performance Series.

District guidelines require teachers to allow middle school students (grades 6, 7, and 8) to use calculators during the mathematics assessment in Performance Series.

Mathematics Reference Sheet: (grades 3-7: no / grade 8: yes)

District guidelines allow 8th grade students to use the mathematics reference sheet, posted on the Missouri Department of Elementary and Secondary Education's website, during the mathematics assessment in Performance Series.



Mathematics Reference Sheet

Formulas

Square	$Area = s^2$	Right Triangular Prism	$Volume = \frac{1}{2}bhl$
Triangle	$Area = \frac{1}{2}bh$	Rectangular Solid	$Volume = lwh$ $Surface\ Area = 2(lw + lh + wh)$
Rectangle	$Area = lw$ $Perimeter = 2l + 2w$	Right Cylinder	$Volume = \pi r^2 h$ $Surface\ Area = 2\pi r^2 + 2\pi rh$
Trapezoid	$Area = \frac{1}{2}h(b_1 + b_2)$	Sphere	$Volume = \frac{4}{3}\pi r^3$ $Surface\ Area = 4\pi r^2$
Circle	$Area = \pi r^2$ $Circumference = \pi d$ or $Circumference = 2\pi r$	Right Cone	$Volume = \frac{1}{3}\pi r^2 h$
		Square Pyramid	$Volume = \frac{1}{3}lwh$
Pi	$\pi = 3.14$	Distance	$d = rt$
Fahrenheit to Celsius	$C = \frac{5}{9}(F - 32)$	Pythagorean Theorem	$a^2 + b^2 = c^2$
Celsius to Fahrenheit	$F = (\frac{9}{5}C) + 32$		where a and b are the legs of the triangle and c is the hypotenuse
Simple Interest	$I = prt$	Standard Form:	$Ax + By = C$
Distance Formula	$D = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$	Slope-Intercept Form:	$y = mx + b$
Midpoint Formula: For a line segment with endpoints (a,b) and (c,d), the midpoint is: $(\frac{a+c}{2}), (\frac{b+d}{2})$		Point-Slope Form:	$y - y_1 = m(x - x_1)$

Conversions

1 yard = 3 feet = 36 inches	8 fluid ounces = 1 cup	1 kilometer = 1000 meters
1 mile = 1760 yards = 5280 feet	2 cups = 1 pint	1 meter = 100 centimeters
1 acre = 43,560 square feet	2 pints = 1 quart	1 centimeter = 10 millimeters
60 seconds = 1 minute	4 quarts = 1 gallon	1 kilogram = 1000 grams
60 minutes = 1 hour	16 ounces = 1 pound	1 liter = 1000 milliliters

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Mathematics Reference Sheet:
http://www.dese.mo.gov/divimprove/assess/documents/mathematics_reference_sheet.pdf