

Content Standards & Benchmarks: Mathematics
Grade 9-12
West Des Moines Community School District

- Standard #1: Students will use mathematics to solve problems, communicate, and work with others.
- 11.1.a write algebraic expressions.
 - 11.1.b evaluate algebraic expressions.
 - 11.1.c solve for the given variable.
- Standard #2: Students will use measurement skills.
- 11.2.d use a formula to determine the area of a plane figure.
 - 11.2.e use a formula to determine the volume of a solid figure.
 - 11.2.f use a formula to determine the lateral area and total surface area of a figure.
- Standard #3: Students will use reasoning skills, mental mathematics, and estimation skills.
- 11.3.g use deductive reasoning to make a valid conclusion.
 - 11.3.h use divisibility rules and the ability to multiply and divide by powers of 10.
 - 11.3.i use rounding and estimation.
- Standard #4: Students will perform mathematical operations and see relationships among numbers.
- 11.4.j solve linear equations and inequalities
 - 11.4.k solve proportions.
 - 11.4.l simplify rational expressions.
 - 11.4.m simplify problems using order of operations.
- Standard #5: Students will demonstrate a development of spatial sense.
- 11.5.n identify plane geometric figures by name.
 - 11.5.o classify triangles by sides or angles.
 - 11.5.p identify and compute the angle relationships of parallel lines.
- Standard #6: Students will collect and analyze data.
- 11.6.q collect and apply information from a graph.
 - 11.6.r calculate the mean, median, and range.
 - 11.6.s analyze bar graphs.
- Standard #7: Students will use patterns and relationships to solve problems.
- 11.7.t use the Pythagorean relationship to solve problems.
 - 11.7.u use a proportion to solve a problem.
 - 11.7.v select and use a formula to find area, surface area and volume.
 - 11.7.w understand functional notation.