*Minnesota*
**Department**
*of* **Education**

## Grade 8 Formula Sheet

**You may use the following formulas to solve problems on this test.**

| | |
|---|---|
| Pythagorean theorem | $a^2 + b^2 = c^2$ |
| Distance formula | $d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$ |
| Slope of a line | $m = \dfrac{y_2 - y_1}{x_2 - x_1}$ |
| Slope-intercept form | $y = mx + b$ |
| Point-slope form | $y - y_1 = m(x - x_1)$ |
| Standard form | $Ax + By = C$ |
| Arithmetic sequence | $f(x) = mx + b$ |
| Geometric sequence | $f(x) = a(b)^x$ |