Formulas that you may need to solve questions on this exam are found below.

You may use calculator \( \pi \) or the number 3.14.

**Arithmetic Properties**

**Additive Inverse:** \( a + (-a) = 0 \)

**Multiplicative Inverse:** \( a \cdot \frac{1}{a} = 1 \)

**Commutative Property:**
- \( a + b = b + a \)
- \( a \cdot b = b \cdot a \)

**Associative Property:**
- \((a + b) + c = a + (b + c)\)
- \((a \cdot b) \cdot c = a \cdot (b \cdot c)\)

**Identity Property:**
- \( a + 0 = a \)
- \( a \cdot 1 = a \)

**Distributive Property:**
- \( a \cdot (b + c) = a \cdot b + a \cdot c \)

**Multiplicative Property of Zero:**
- \( a \cdot 0 = 0 \)

**Additive Property of Equality:**
- If \( a = b \), then \( a + c = b + c \)

**Multiplicative Property of Equality:**
- If \( a = b \), then \( a \cdot c = b \cdot c \)

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**Linear Equations**

**Slope:** \( m = \frac{y_2 - y_1}{x_2 - x_1} \)

**Point-Slope Formula:** \( (y - y_1) = m(x - x_1) \)

**Slope-Intercept Formula:** \( y = mx + b \)

**Standard Equation of a Line:** \( Ax + By = C \)