## EOC MULTIPLE CHOICE PRACTICE

1) If triangle $A B C$ is rotated 180 degrees, what are the coordinates of $A^{\prime}$ ?
a) $(-5,-4)$
b) $(-5,4)$
c) $(-4,5)$
d) $(-4,-5)$

2) What are the coordinates of R' after triangle RST is rotated 90 degrees clockwise?
a) $(-3,-4)$
b) $(-4,-3)$
c) $(3,4)$
d) $(4,3)$

3) Triangle RST is reflected across the $y$-axis and then, translated 1 unit up to create triangle R'S'T. What are the coordinates of S'?
a) $(-5,-2)$
b) $(-5,0)$
C) $(-4,-1)$
d) $(-4,0)$

4) Which statement describes the transformation that would map triangle $M$ to triangle N on this grid?
a) $(x, y) \rightarrow(-x+5,-y)$
b) $(x, y) \rightarrow(-x+5, y)$
c) $(x, y) \rightarrow(x+5,-y)$
d) $(x, y) \rightarrow(x+5, y)$

5) Which expression describes the translation of a point from $(-3,4)$ to $(4,-1)$ ?
a) 7 units left, 5 units up
b) 7 units right, 5 units up
c) 7 units left, 5 units down
d) 7 units right, 5 units down
6) A regular pentagon is centered about the origin and has a vertex at (0,4). Which transformation maps the pentagon to itself?
a) reflection across line $m$
b) reflection about the $x$-axis
c) a clockwise rotation $100^{\circ}$ about the origin
d) a clockwise rotation $144^{\circ}$ about the origin

7) Given: TRAP is an isosceles trapezoid with diagonals $\overline{R P}$ and $\overline{T A}$. Which of the following must be true?
a) $\overline{R P} \perp \overline{T A}$
b) $\overline{R P} \| \overline{T A}$
c) $\overline{R P} \cong \overline{T A}$
d) $\overline{R P}$ bisects $\overline{T A}$
8) What values of $a$ and $b$ make quadrilateral MNOP a parallelogram?

a) $a=1, b=5$
b) $a=5, b=1$
c) $a=11 / 7, b=34 / 7$
d) $a=34 / 7, b=11 / 7$
9) Quadrilateral $A B C D$ is a parallelogram. If adjacent angles are congruent, which statement must be true?
a) $A B C D$ is a square
b) $A B C D$ is a rhombus
c) $A B C D$ is a rectangle
d) $A B C D$ is isosceles
10) If $A B C D$ is a parallelogram, what is the length of segment $B D$ ?

a) 10
b) 11
c) 12
d) 14
11) What is the area, in square centimeters, of rhombus RSTV if RT $=16 \mathrm{~cm}$ and $S V=12 \mathrm{~cm}$ ?

a) $40 \mathrm{~cm} .^{2}$
b) $48 \mathrm{~cm} .{ }^{2}$
c) $96 \mathrm{~cm} .^{2}$
d) $192 \mathrm{~cm} .{ }^{2}$
12) In the figure below, $\overline{A B} \| \overline{C D}$. What is the value of $x$ ?

a) 40
b) 50
c) 80
d) 90
