SAT Focused Practice Worksheet 1- Geometry –
## Triangles-Quadrilaterals-Lines-Angles-Arcs

Multiple Choice
Identify the choice that best completes the statement or answers the question.

_____ 1. If the measure of one of the angles in a parallelogram is z, what is the measure of an adjacent angle?
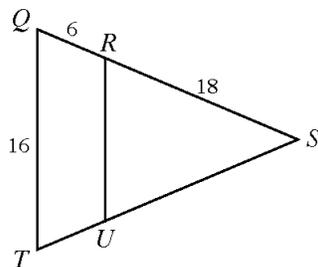
a. $180 - z$

d. $180 - \frac{z}{2}$

b. $360 - 2z$

e. z

c. $360 - z$

_____ 2. In figure below, the measure of $\angle A$ is $60°$. If the measure of $\angle B$ is twice the measure of $\angle C$, what is the measure of $\angle C$?
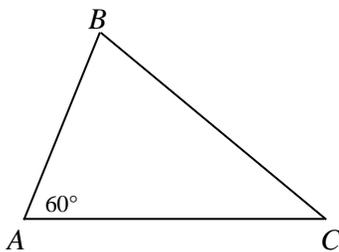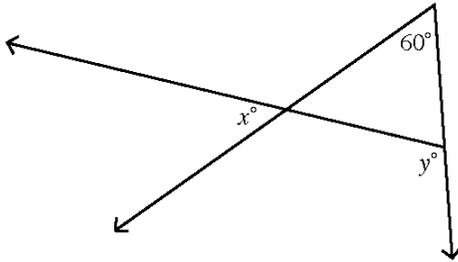

a. $120°$

d. $80°$

b. $40°$

e. $20°$

c. $90°$

_____ 3. In the figure below, $\triangle QST$ is similar to $\triangle RSU$. What is the length of $\overline{RU}$?
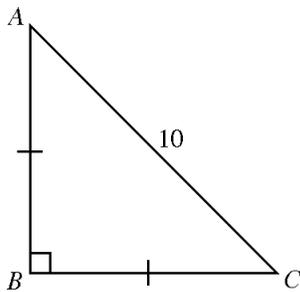

a. 10

d. 12

b. $\frac{3}{16}$

e. $\frac{16}{3}$

c. $\frac{64}{3}$

____ 4. In the figure below, what is the value of *y* in terms of *x*?

a. $x + 60$

b. $2x$

c. $300 - x$

d. $120 - x$

e. x

____ 5. In $\triangle ABC$ below, if $AC = 10$, then AB is equal tor
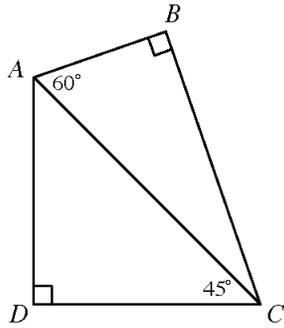

a. $5\sqrt{2}$

b. 8

c. $2\sqrt{5}$

d. $10\sqrt{2}$

e. 5

____ 6. If one side of a triangle is three times as long as a second side, then the perimeter of the triangle could be:

a. $6x$

b. $3x$

c. $7x$

d. $5x$

e. $4x$

_____ 7. In the figure below, $\angle B$ and $\angle D$ are right angles. What is the length of $\overline{BC}$?

a. $2\sqrt{6}$

b. $4\sqrt{2}$

c. $2\sqrt{2}$

d. $4\sqrt{3}$

e. $2\sqrt{3}$

_____ 8. A parallelogram with two congruent adjacent sides must be a:

a. trapezoid

b. isosceles trapezoid

c. rectangle

d. square

e. rhombus

_____ 9. In the figure below, line a is parallel to line b. Line c intersects both a and b with angles 1, 2, 3, 4, 5, 6, 7, and 8 as shown. Which of the following lists include all of the angles that are congruent to angle 6?
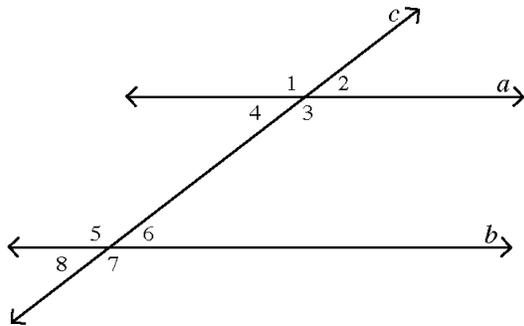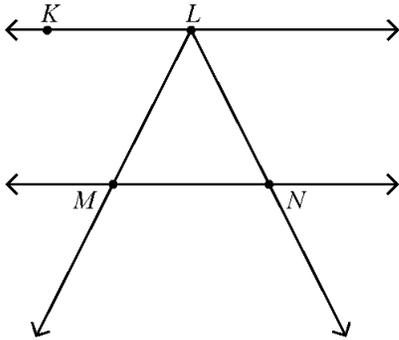

a. angles 5, 7, 3, and 1

b. angles 8, 4, and 3

c. angles 8, 4, and 2

d. angles 5, 7, and 3

e. angles 8, 7, and 4

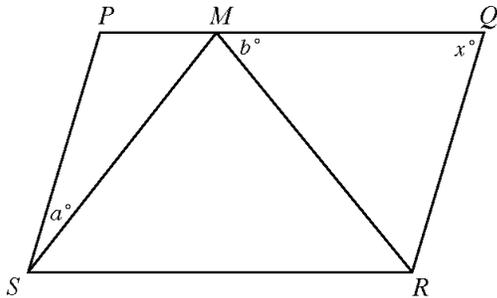____ 10. In the figure below, which pair of angles are supplementary?
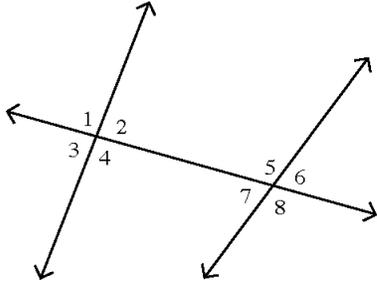
a. $\angle 3$ and $\angle 7$
b. $\angle 1$ and $\angle 4$
c. $\angle 5$ and $\angle 7$

d. $\angle 4$ and $\angle 7$
e. $\angle 2$ and $\angle 5$

____ 11. In the figure below, $\overline{KL} \parallel \overline{NM}$. What is the length of $\overline{LN}$?
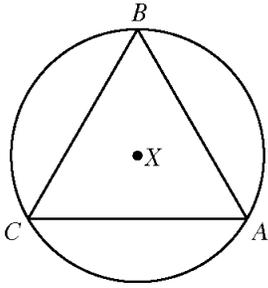

a. 10
b. 11
c. $12\sqrt{2}$
d. 11
e. It cannot be determined from the given information.

____ 12. In the figure below, quadrilateral $PQRS$ is a parallelogram. If $\angle SMR$ is a right angle, then x must be equal:
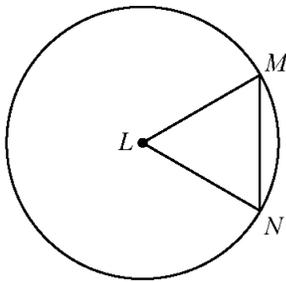

a. b
b. $90 + a$
c. $90 - b$

d. $90 + a - b$
e. $90 - (a + b)$

____ 13. Equilateral triangle *ABC* is inscribed in circle *X*. What is the measure of arc *AB*?

a. 30°   d. 120°
b. 60°   e. 240°
c. 90°

____ 14. In the figure below, $\triangle LMN$ is an equilateral triangle. If $\overline{LM}$ is 4 units long, how many units long is arc *MN*?

a. $\dfrac{8\pi}{3}$ d. $\dfrac{\pi}{3}$

b. $\dfrac{4\pi}{3}$ e. π

c. $\dfrac{2\pi}{3}$