## GEOMETRY 4: TRIANGLES

1. In $\triangle \mathrm{MON}$ name:
a. the angle opposite $\overline{\mathrm{MO}}$
b. the side opposite $\angle \mathrm{MNO}$
c. the side opposite $\angle \mathrm{O}$

d. the angle opposite $\overline{\mathrm{ON}}$
2. Classify the following triangles as either acute, right or obtuse triangles, as well as scalene, isosceles or equilateral triangles.
a.

b.

c.

d.

e.

f.

3. Fill in the blanks with the correct answer.
a. An equilateral triangle has $\qquad$ congruent sides and three $\qquad$ angles each measuring $\qquad$ .
b. An isosceles triangle has $\qquad$ congruent sides. The angles opposite these congruent sides are $\qquad$ .
c. The sum of the interior angles of any triangle is always $\qquad$ -
d. If a triangle has two congruent angles, then the sides opposite the congruent angles are $\qquad$
$\qquad$ .
4. Determine the measure of angle $x$ in each of the following diagrams.
a.

b.

c.

d.

e.

f.


## ANSWER KEY

1. a. $\angle \mathrm{N}$ or $\angle \mathrm{MNO}$
b. MO
c. $\mathrm{MN} \mathrm{d} . \angle \mathrm{M}$
2. a. acute and isosceles
b. obtuse and scalene
c. right and scalene
d. acute and equilateral
e. obtuse and isosceles
f. right and isosceles
3. a. three congruent $60^{\circ}$
b. two congruent
c. $180^{\circ}$ d. congruent
4. a. $60^{\circ}$
b. $20^{\circ}$
c. $66^{\circ}$
d. $58^{\circ}$
e. $45^{\circ}$
f. $60^{\circ}$

Source: Government of BC used with permission.

