Math Sheet

Name _____ Score _____ Teacher _____ Date _____

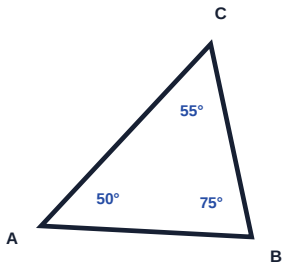
Order Triangle Sides

Use the angle measures to order the opposite sides from longest to shortest or identify the longest and shortest sides.

Section 1: Order all sides

Write the complete order from largest to smallest. Use the opposite side-angle relationship.

1. Order the sides of triangle ABC from longest to shortest.

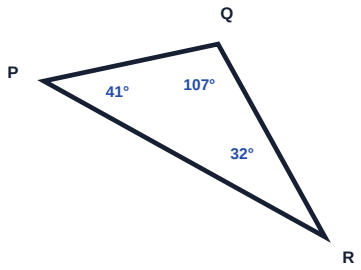


Largest to smallest:

_____

_____

2. Order the sides of triangle PQR from longest to shortest.



Largest to smallest:

_____

_____

3. Order the sides of triangle XYZ from longest to shortest.

Angle X = 46°, Angle Y = 98°, Angle Z = 36°

Largest to smallest:

_____

_____

4. Order the sides of triangle JKL from longest to shortest.

Angle J = 95°, Angle K = 29°, Angle L = 56°

Largest to smallest:

_____

_____

Name _____ Score _____ Teacher _____ Date _____

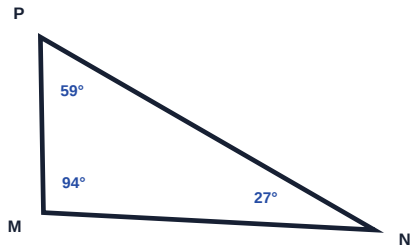
Order Triangle Sides

Use the angle measures to order the opposite sides from longest to shortest or identify the longest and shortest sides.

Section 2: Name the longest and shortest sides

Identify both extremes from the opposite side-angle relationship.

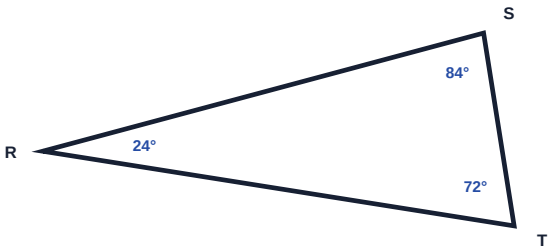
5. Name the longest and shortest sides of triangle MNP.



Largest: _____

Smallest: _____

6. Name the longest and shortest sides of triangle RST.



Largest: _____

Smallest: _____

7. Name the longest and shortest sides of triangle DEF.

Angle D = 69°, Angle E = 80°, Angle F = 31°

Largest: _____

Smallest: _____

8. Name the longest and shortest sides of triangle UVW.

Angle U = 57°, Angle V = 96°, Angle W = 27°

Largest: _____

Smallest: _____

Math Sheet

Name _____ Score _____ Teacher _____ Date _____

Order Triangle Sides

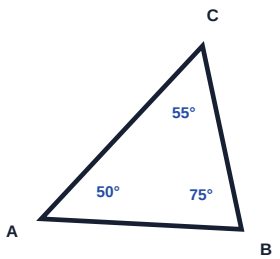
Worked Answer Key

Use the angle measures to order the opposite sides from longest to shortest or identify the longest and shortest sides.

Section 1: Order all sides

Write the complete order from largest to smallest. Use the opposite side-angle relationship.

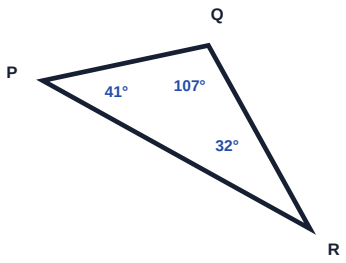
1. Order the sides of triangle ABC from longest to shortest.



Angle order: Angle B (75°) > Angle C (55°) > Angle A (50°).
Opposite sides: Angle B <-> AC, Angle C <-> AB, Angle A <-> BC.
Side order: AC > AB > BC.

AC > AB > BC

2. Order the sides of triangle PQR from longest to shortest.



Angle order: Angle Q (107°) > Angle P (41°) > Angle R (32°).
Opposite sides: Angle Q <-> PR, Angle P <-> QR, Angle R <-> PQ.
Side order: PR > QR > PQ.

PR > QR > PQ

3. Order the sides of triangle XYZ from longest to shortest.

Angle X = 46°, Angle Y = 98°, Angle Z = 36°

Angle order: Angle Y (98°) > Angle X (46°) > Angle Z (36°).
Opposite sides: Angle Y <-> XZ, Angle X <-> YZ, Angle Z <-> XY.
Side order: XZ > YZ > XY.

XZ > YZ > XY

4. Order the sides of triangle JKL from longest to shortest.

Angle J = 95°, Angle K = 29°, Angle L = 56°

Angle order: Angle J (95°) > Angle L (56°) > Angle K (29°).
Opposite sides: Angle J <-> KL, Angle L <-> JK, Angle K <-> JL.
Side order: KL > JK > JL.

KL > JK > JL

Name _____ Score _____ Teacher _____ Date _____

Order Triangle Sides

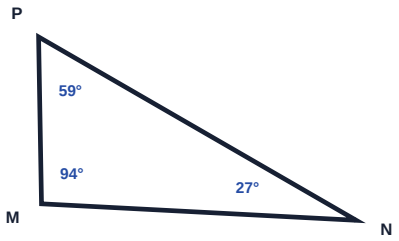
Worked Answer Key

Use the angle measures to order the opposite sides from longest to shortest or identify the longest and shortest sides.

Section 2: Name the longest and shortest sides

Identify both extremes from the opposite side-angle relationship.

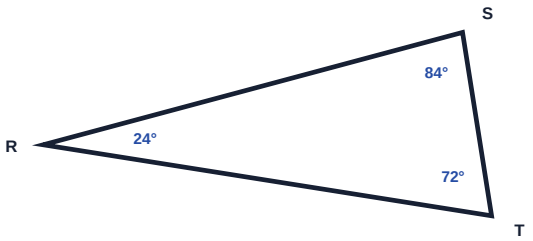
5. Name the longest and shortest sides of triangle MNP.



Angle order: Angle M (94°) > Angle P (59°) > Angle N (27°).
Opposite sides: Angle M <-> NP, Angle P <-> MN, Angle N <-> MP.
Side order: NP > MN > MP.

Largest: NP **Smallest: MP**

6. Name the longest and shortest sides of triangle RST.



Angle order: Angle S (84°) > Angle T (72°) > Angle R (24°).
Opposite sides: Angle S <-> RT, Angle T <-> RS, Angle R <-> ST.
Side order: RT > RS > ST.

Largest: RT **Smallest: ST**

7. Name the longest and shortest sides of triangle DEF.

Angle D = 69°, Angle E = 80°, Angle F = 31°

Angle order: Angle E (80°) > Angle D (69°) > Angle F (31°).
Opposite sides: Angle E <-> DF, Angle D <-> EF, Angle F <-> DE.
Side order: DF > EF > DE.

Largest: DF **Smallest: DE**

8. Name the longest and shortest sides of triangle UVW.

Angle U = 57°, Angle V = 96°, Angle W = 27°

Angle order: Angle V (96°) > Angle U (57°) > Angle W (27°).
Opposite sides: Angle V <-> UW, Angle U <-> VW, Angle W <-> UV.
Side order: UW > VW > UV.

Largest: UW **Smallest: UV**