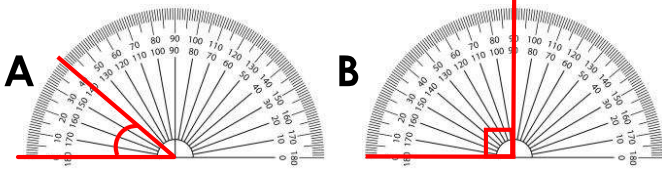


Measuring with a Protractor 1

Measuring with a Protractor 1

1a. Circle the letter of the angle that is $< 90^\circ$?



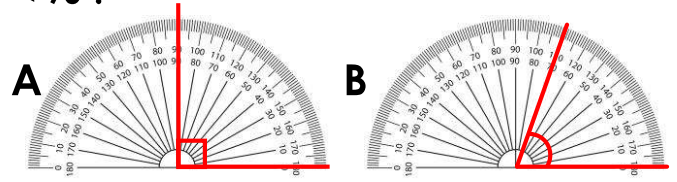
Give the measurement for each angle.

A = _____ B = _____



VF

1b. Circle the letter of the angle that is $< 90^\circ$?



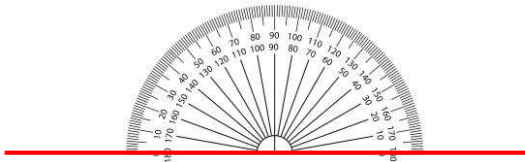
Give the measurement for each angle.

A = _____ B = _____



VF

2a. Draw an angle which is $< 90^\circ$.



Which title would you use for your angle?

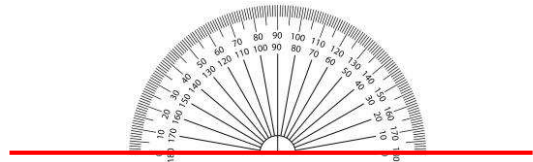


Acute Angle

Right Angle

VF

2b. Draw an angle which is $< 90^\circ$.



Which title would you use for your angle?

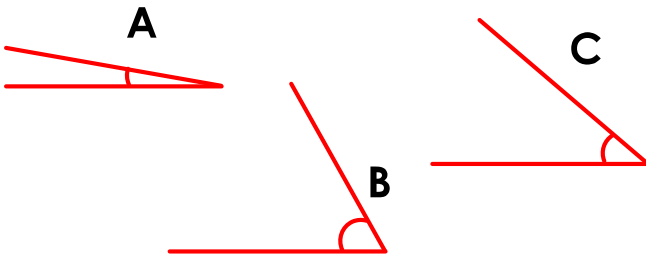


Acute Angle

Right Angle

VF

3a. Estimate the size of the acute angles.



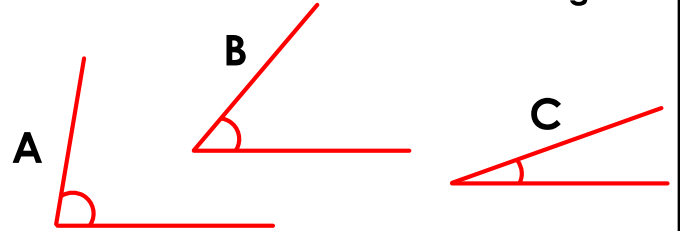
Now use a protractor to measure your accuracy. Record your results in a table.

Angle	Estimated	Measured
A		
B		
C		



VF

3b. Estimate the size of the acute angles.



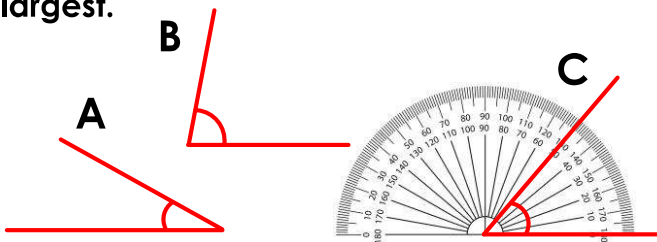
Now use a protractor to measure your accuracy. Record your results in a table.

Angle	Estimated	Measured
A		
B		
C		



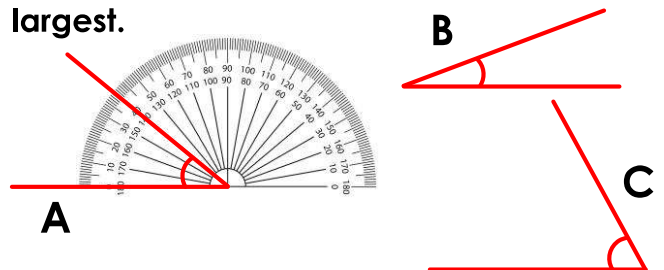
VF

4a. Order the angles from smallest to largest.



VF

4b. Order the angles from smallest to largest.

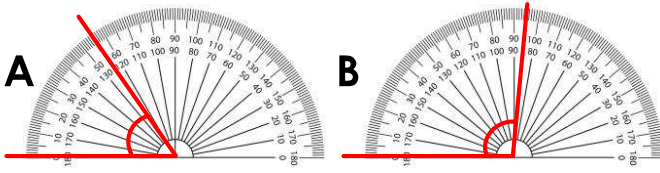


VF

Measuring with a Protractor 1

Measuring with a Protractor 1

5a. Circle the letter of the angle that is $< 90^\circ$?



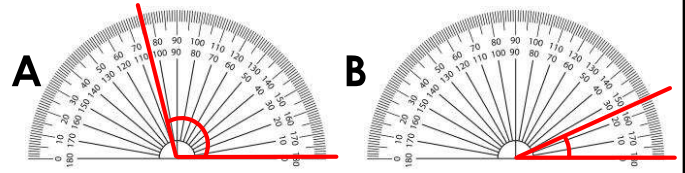
Give the measurement for each angle.

A = _____ B = _____



VF

5b. Circle the letter of the angle that is $< 90^\circ$?



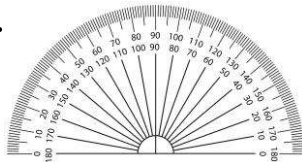
Give the measurement for each angle.

A = _____ B = _____



VF

6a. Draw an angle which is $< 90^\circ$ using the outer scale.



Which title would you use for your angle?



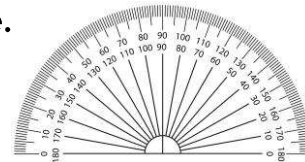
Acute

Right

Obtuse

VF

6b. Draw an angle which is $< 90^\circ$ using the inner scale.



Which title would you use for your angle?



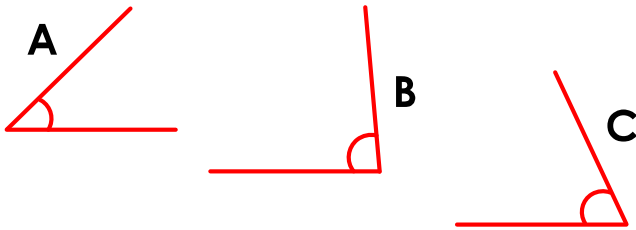
Acute

Right

Obtuse

VF

7a. Estimate the size of the acute angles.



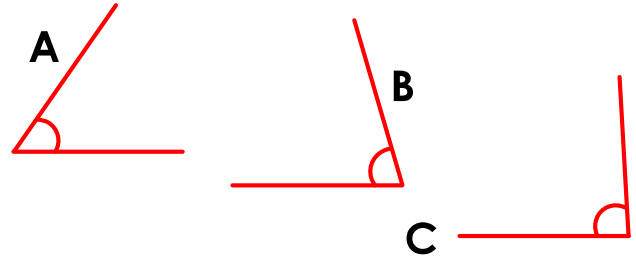
Now use a protractor to measure your accuracy. Record your results in a table.

Angle	Estimated	Measured
A		
B		
C		



VF

7b. Estimate the size of the acute angles.



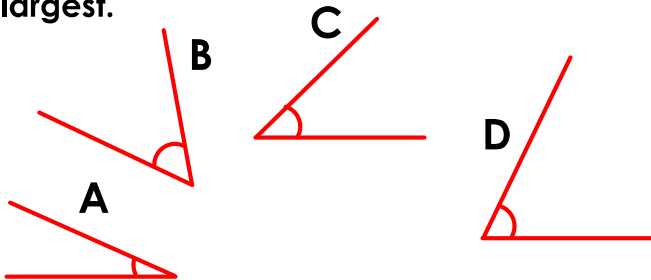
Now use a protractor to measure your accuracy. Record your results in a table.

Angle	Estimated	Measured
A		
B		
C		



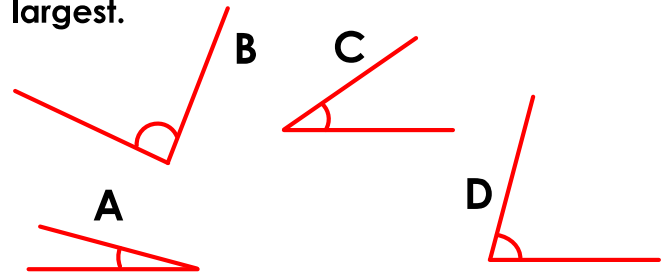
VF

8a. Order the angles from smallest to largest.



VF

8b. Order the angles from smallest to largest.



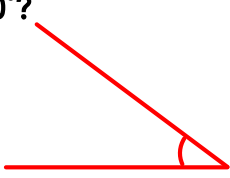
VF

Measuring with a Protractor 1

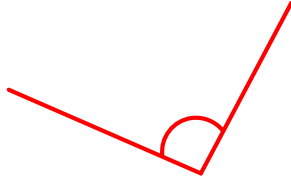
Measuring with a Protractor 1

9a. Circle the letter of the angle that is $< 90^\circ$?

A



B



Give the measurement for each angle.

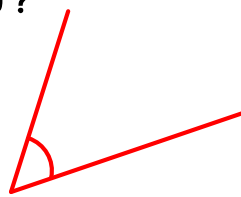
A = _____ B = _____



VF

9b. Circle the letter of the angle that is $< 90^\circ$?

A



B



Give the measurement for each angle.

A = _____ B = _____



VF

10a. Draw an angle which is $< 90^\circ$ using the inner scale of your protractor.



Give your angle a title using mathematical language to describe its size.



VF

10b. Draw an angle which is $< 90^\circ$ using the outer scale of your protractor.



Give your angle a title using mathematical language to describe its size.



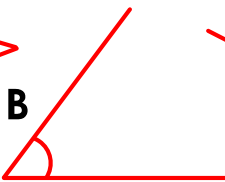
VF

11a. Estimate the size of the acute angles.

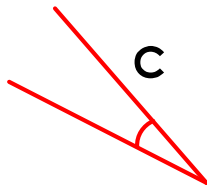
A



B



C



Use a protractor to measure your accuracy. Record your results in a table.

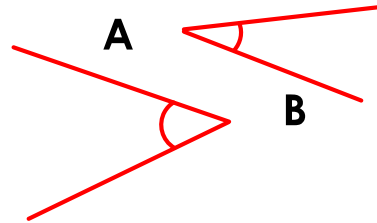
Angle	Estimated	Measured
A		
B		
C		



VF

11b. Estimate the size of the acute angles.

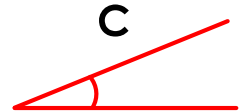
A



B



C



Use a protractor to measure your accuracy. Record your results in a table.

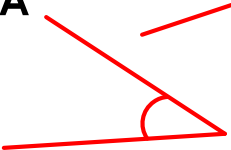
Angle	Estimated	Measured
A		
B		
C		



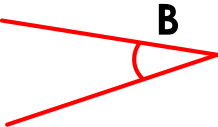
VF

12a. Order the angles from smallest to largest.

A



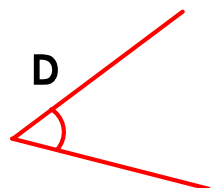
B



C



D



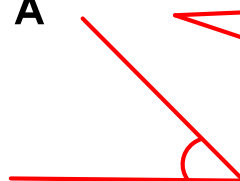
— — — —



VF

12b. Order the angles from smallest to largest.

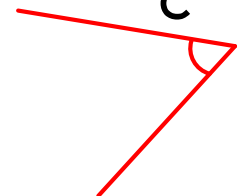
A



B



C



D



— — — —



VF

Varied Fluency Measuring with a Protractor 1

Teaching Note: Measurements may vary due to printer settings.

Developing

- 1a. A is $< 90^\circ$. $A = 40^\circ$ $B = 90^\circ$
2a. Teacher to mark angles $< 90^\circ$ drawn by pupil. Acute angle label should be used.
3a. $A = 10^\circ$ $B = 60^\circ$ $C = 40^\circ$
4a. A, C, B

Expected

- 5a. A is $< 90^\circ$. $A = 55^\circ$ $B = 95^\circ$
6a. Teacher to mark angles $< 90^\circ$ drawn by pupil using outer scale. Acute angle label should be used.
7a. $A = 45^\circ$ $B = 85^\circ$ $C = 65^\circ$
8a. A, C, B, D

Greater Depth

- 9a. A is $< 90^\circ$. $A = 37^\circ$ $B = 94^\circ$
10a. Teacher to mark angles $< 90^\circ$ drawn by pupil using inner scale. Title should refer to acute angles.
11a. $A = 37^\circ$ $B = 53^\circ$ $C = 21^\circ$
12a. C, B, A, D

Varied Fluency Measuring with a Protractor 1

Teaching Note: Measurements may vary due to printer settings.

Developing

- 1b. B is $< 90^\circ$. $A = 90^\circ$ $B = 70^\circ$
2b. Teacher to mark angles $< 90^\circ$ drawn by pupil. Acute angle label should be used.
3b. $A = 80^\circ$ $B = 50^\circ$ $C = 20^\circ$
4b. B, A, C

Expected

- 5b. B is $< 90^\circ$. $A = 105^\circ$ $B = 25^\circ$
6b. Teacher to mark angles $< 90^\circ$ drawn by pupil using inner scale. Acute angle label should be used.
7b. $A = 55^\circ$ $B = 75^\circ$ $C = 85^\circ$
8b. A, C, D, B

Greater Depth

- 9b. A is $< 90^\circ$. $A = 54^\circ$ $B = 97^\circ$
10b. Teacher to mark angles $< 90^\circ$ drawn by pupil using outer scale. Title should refer to acute angles.
11b. $A = 28^\circ$ $B = 44^\circ$ $C = 23^\circ$
12b. D, B, A, C