



GRADE 4 / WATCH MR DJ SOLVE

ANGLES AND THE PROTRACTOR

Start with the same example used in the lesson slides.

**WATCH MR DJ SOLVE**

Use a protractor to construct a 60° angle. Label its vertex, rays and smaller angle. Classify it.

- 1 Draw a baseline ray and put the protractor center at its endpoint.
- 2 Use the scale whose 0 lies on that ray, then mark the requested degree.
- 3 Draw the second ray through the mark. 60° is acute.

Answer: **60° ; acute**



REMEMBER Angle measures the turn between rays. Align the center and baseline, then choose the correct zero scale.

Read each step and explain why it is valid. The next pages demonstrate the methods in more detail. Then use the large work areas on the numbered practice pages.



GRADE 4 / WORKED METHODS

ANGLES AND THE PROTRACTOR

Read a complete example before trying the matching method.



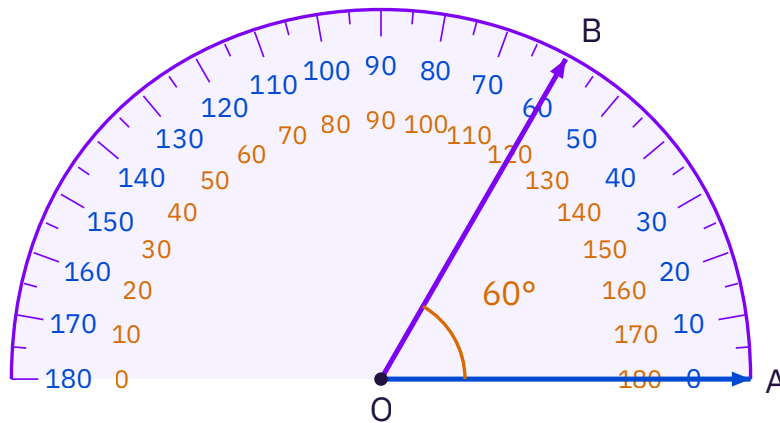
Use these examples as a reference. Keep each quantity and its unit visible. A different valid method is welcome unless a question specifically requests one.

Construct a sixty-degree turn

60° is an acute angle

1. Put the center at the baseline endpoint.
2. Start at the right-hand zero and mark 60°.
3. Draw the second ray through the mark; the turn is below 90°.

Center at O; choose the scale starting at A





GRADE 4 / WORKED METHODS

ANGLES AND THE PROTRACTOR

Read a complete example before trying the matching method.



Use these examples as a reference. Keep each quantity and its unit visible. A different valid method is welcome unless a question specifically requests one.

Choose the scale from the baseline

An acute 40° angle is not 140°

1. The same tick can have two labels.
2. Choose the scale starting at zero on your first ray.
3. Check acute versus obtuse before accepting the reading.



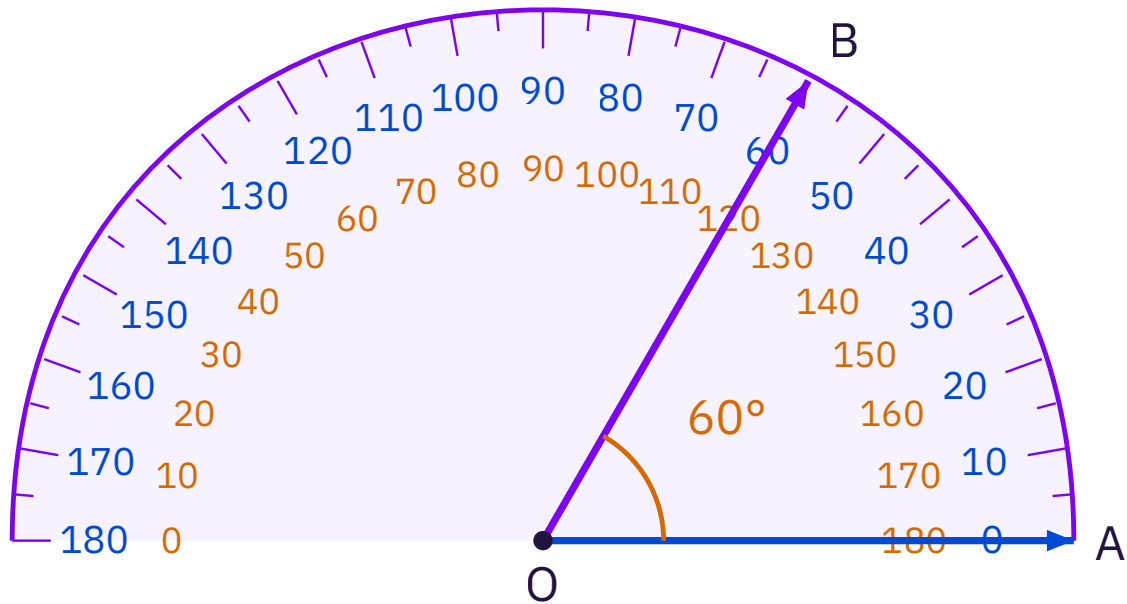
GRADE 4 / PROTRACTOR REFERENCE AND CONSTRUCTION GUIDE

ANGLES AND THE PROTRACTOR

Use a pencil and ruler. Keep the given unit intervals and mirror directions.



Center at O; choose the scale starting at A



Use the large work areas in the packet for your answers. This reference/tool may be reused as needed.



GRADE 4 / PRACTICE

ANGLES AND THE PROTRACTOR

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

◀ Mild

1. Use a protractor to construct a 90° angle. Label its vertex, rays and smaller angle. Classify it.

My answer / conclusion: _____



GRADE 4 / PRACTICE

ANGLES AND THE PROTRACTOR

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

◀ Mild

2. Use a protractor to construct a 120° angle. Label its vertex, rays and smaller angle. Classify it.

My answer / conclusion: _____



GRADE 4 / PRACTICE

ANGLES AND THE PROTRACTOR

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

🔊 Medium

3. A ray begins at the RIGHT-hand zero. The other ray crosses marks 40° and 140° . Which reading is correct? Explain.

Grid area for drawing and explanation.

My answer / conclusion: _____



GRADE 4 / PRACTICE

ANGLES AND THE PROTRACTOR

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Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

🔊 Medium

4. Draw a right angle with short rays, then extend both rays. Measure both angles. What changes?

My answer / conclusion: _____



GRADE 4 / PRACTICE

ANGLES AND THE PROTRACTOR

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

🔊 Medium

5. Explain how to measure an angle opening LEFT using a semicircular protractor. Include center, baseline and scale.

Grid area for drawing and explanation.

My answer / conclusion: _____



GRADE 4 / PRACTICE

ANGLES AND THE PROTRACTOR

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

🌶️🌶️🌶️ Spicy

6. An angle looks acute, but a student reads 140° . What likely happened? Explain how to check without remeasuring.

Grid area for student work.

My answer / conclusion: _____

GRADE 4 / PRACTICE

ANGLES AND THE PROTRACTOR

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

Spicy

7. Can a longer-looking drawing have a smaller angle? Construct an example and explain what angle measures.

My answer / conclusion: _____

GRADE 4 / PRACTICE

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Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

Extra Spicy

8. Explain why rotating a paper containing an angle cannot change its measure. What if only ONE ray is rotated?

My answer / conclusion: _____