



GRADE 4 / WATCH MR DJ SOLVE

ADDING ANGLES AND FINDING UNKNOWNNS

Start with the same example used in the lesson slides.

**WATCH MR DJ SOLVE**

A 90° angle is split into two **NONOVERLAPPING** adjacent angles. One is 35° . Draw and find the other.

- 1 Adjacent parts together measure 90° .
- 2 $90 - 35 = 55$.
- 3 Check $35 + 55 = 90^\circ$.

Answer: **55°****REMEMBER** Add nonoverlapping adjacent turns; subtract known parts from a labeled whole angle.

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

ADDING ANGLES AND FINDING UNKNOWNNS

Read a complete example before trying the matching method.

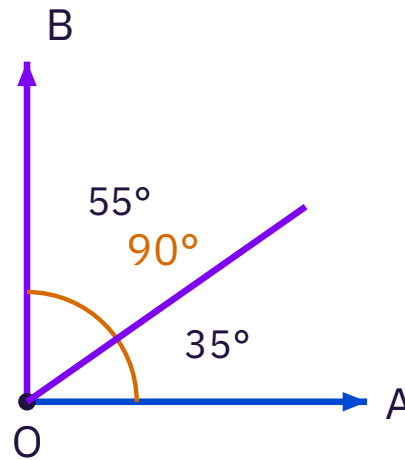


Use these examples as a reference. Keep each quantity and its unit visible. A different valid method is welcome unless a question specifically requests one.

Find a missing part of a right angle

$$90^\circ - 35^\circ = 55^\circ$$

1. The two adjacent parts make a right angle.
2. Subtract the known 35° from 90° .
3. The unknown is 55° ; $35+55=90^\circ$.



GRADE 4 / WORKED METHODS**ADDING ANGLES AND FINDING UNKNOWNNS**

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.

Find one of three adjacent parts

$$180^\circ - (35^\circ + 60^\circ) = 85^\circ$$

1. The outside angle is straight: 180° .
2. Known parts total 95° .
3. The remaining adjacent turn measures 85° .



GRADE 4 / PRACTICE

ADDING ANGLES AND FINDING UNKNOWNNS

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. A 180° angle is split into two NONOVERLAPPING adjacent angles. One is 65° . Draw and find the other.

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.

◀ Mild

2. A 120° angle is split into two **NONOVERLAPPING** adjacent angles. One is 45° . Draw and find the other.

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.

🔊 Medium

3. Two adjacent angles measure 25° and 40° . Find the combined angle; draw a labeled sketch.

My answer / conclusion: _____

🔊 Medium

4. Three adjacent angles form a straight angle. Two measure 35° and 60° . Find the third.

My answer / conclusion: _____

**GRADE 4 / PRACTICE****ADDING ANGLES AND FINDING UNKNOWNNS**

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. Angles around one point total 360° . Three consecutive turns are 90° , 120° and 60° . Find the remaining turn.

My answer / conclusion: _____

Spicy

6. A student adds 70° and 40° from overlapping angles and calls their outside angle 110° . Explain why this need not work.

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.

🔥🔥🔥 Spicy

7. Split a right angle into three DIFFERENT positive whole-degree angles. Give two designs and explain a check.

My answer / conclusion: _____



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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. A straight angle is split into equal adjacent parts, each a whole number of degrees.

Can there be 7 equal parts? Explain.

Grid area for student work.

My answer / conclusion: _____