

“THAT’S ~~NOT~~ FAIR” | SOCRATIC SEMINARS

Six Types Of Socratic Questions Applied To Math

Source: Triumphant Learning

1. Questions that clarify.
2. Questions that challenge assumptions.
3. Questions that examine evidence or reasons.
4. Questions about viewpoints and perspectives.
5. Questions that explore implications and consequences.
6. Questions about the question.

Questions that clarify

- What is another way you could solve that problem?
- How does the radius of a circle relate to the diameter of a circle?
- Could you give me an example of congruent shapes?
- Could you explain that further?
- How does this relate to what you learned about angles?

Questions that challenge assumptions

- What assumptions are you making to solve the problem?
- Could you solve the problem with different assumptions?
- Does this formula always apply or are there circumstances that require a different approach or formula?
- Is a rectangle always a parallelogram? Is a parallelogram always a rectangle?

- Why is a larger base more stable than a narrow base?

Questions that examine evidence or reasons

- What would be an example of that principle?
- What other information do you need to know to solve this problem?
- Does the formula you learned yesterday apply to this problem?
- What is another example of when you would apply this rule/formula?
- Why are you using this formula?

Questions about viewpoints and perspectives

- What is another way to approach this problem?
- Could you solve this problem if you assumed $x=8$?
- Would you explain why you used this unit of measure?
- How are the formulas for the area of a triangle and the area of a rectangle similar? How are they different?
- Would the formula apply to an isosceles triangle and a right triangle?

Questions that explore implications and consequences

- What is an alternative way to solve this problem?
- If these are right angles and the opposite sides are parallel, what is this shape?
- What effect would changing this angle have on the shape.

- If this length is doubled, would the shape be classified the same?
- What generalizations can you make about squares?

Questions about the question

- How can you prove that answer?
- Can you break this problem down into simpler components?
- Do you have all of the facts you need to solve this problem?
- What is the main question for which you need to find the answer?
- Does this question provide additional information that changes your answer to the previous problem?