

- What is the measure of the acute angle formed by the hands of a clock at 4:20 a.m.?

(A) 0° (B) 5° (C) 8° (D) 10° (E) 12°

2003 AMC 8, Problem #20—“What fraction of an hour has passed after 20 minutes?”

- **Solution (D)** As the minute hand moves $\frac{1}{3}$ of the way around the clock face from 12 to 4, the hour hand will move $\frac{1}{3}$ of the way from 4 to 5. So the hour hand will move $\frac{1}{3}$ of $\frac{1}{12}$ of 360° , or 10° .

Difficulty: Hard

NCTM Standard: Problem Solving Standard for Grades 6–8: Apply and adapt a variety of appropriate strategies to solve problems.

Mathworld.com Classification:

Geometry > Trigonometry > Angles > Angle