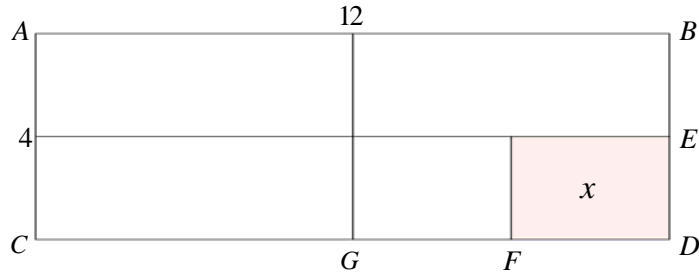


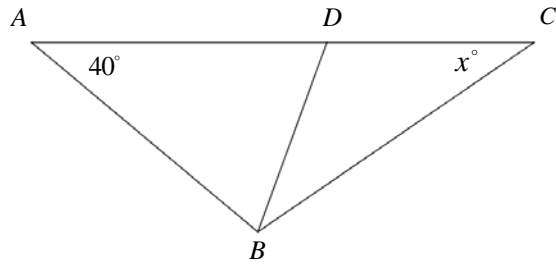
UB SAT 2009
Homework #24
Estimation
Due: Thurs, May 28



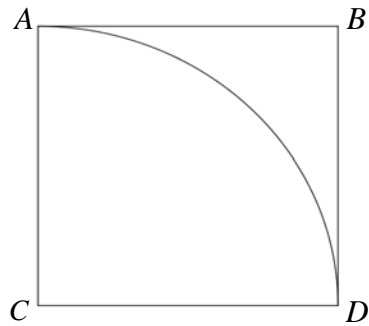
1. If F is equidistant from G and D , and E is equidistant from B and D , what fractional part of rectangle $ABCD$ is area x ?
 - (A) $\frac{1}{16}$
 - (B) $\frac{1}{8}$
 - (C) $\frac{1}{4}$
 - (D) $\frac{1}{3}$
 - (E) $\frac{1}{2}$

2. If Sarah bought 12 pies for \$30, how many pies could she have bought for \$37.50 at the same rate?
 - (A) 9
 - (B) 10
 - (C) 12
 - (D) 14
 - (E) 15

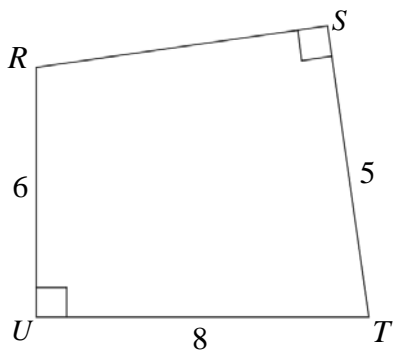
3. If a runner completes one lap of a track in 64 seconds, approximately how many minutes will it take her to run 40 laps at the same speed?
 - (A) 25
 - (B) 30
 - (C) 43
 - (D) 52
 - (E) 128



4. In the figure above, $BD = DC$ and $AB = AD$. What is the value of x ?
- (A) 110
 - (B) 70
 - (C) 55
 - (D) 35
 - (E) 15



5. In the figure above, $ABCD$ is a square with sides of 4. What is the length of arc AD ?
- (A) 8π
 - (B) 4π
 - (C) 3π
 - (D) 2π
 - (E) π



6. In the figure above, what is the length of RS ?
- (A) 10
 - (B) $5\sqrt{3}$
 - (C) 8
 - (D) $\sqrt{5}$
 - (E) $2\sqrt{3}$