

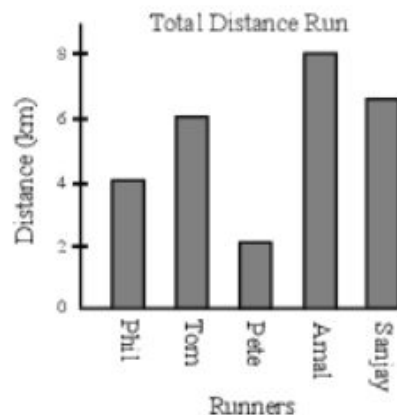
1. The number 0.2012 is between

- (A) 0 and  $\frac{1}{10}$     (B)  $\frac{1}{10}$  and  $\frac{1}{5}$     (C)  $\frac{1}{5}$  and  $\frac{1}{4}$     (D)  $\frac{1}{4}$  and  $\frac{1}{3}$     (E)  $\frac{1}{3}$  and  $\frac{1}{2}$

2. The graph shows the total distance that each of five runners ran during a one-hour training session.

Which runner ran the median distance?

- (A) Phil            (B) Tom            (C) Pete  
(D) Amal            (E) Sanjay



3. A recipe calls for  $4\frac{1}{2}$  cups of flour. If you only make half of the recipe, then how many cups of flour do you need?

4. Bethany, Chun, Dominic, and Emily go to the movies. They choose a row with four consecutive empty seats. If Dominic and Emily must sit beside each other, in how many different ways can the four friends sit?

5. The operation  $\Delta$  is defined so that  $a\Delta b = a \times b + a + b$ . For example,  $2\Delta 5 = 2 \times 5 + 2 + 5 = 17$ . If  $p\Delta 3 = 39$ , the value of  $p$  is

6. In  $\triangle PQR$ , a line segment is drawn from  $P$  to point  $S$  on side  $QR$ . If  $\triangle PQS$  and  $\triangle PRS$  have the same area, which of the following statements *must* be true?

- (A)  $PQ = PR$     (B)  $PS = PQ$     (C)  $QR = PS$   
(D)  $QS = SR$     (E)  $PQ = QR$

