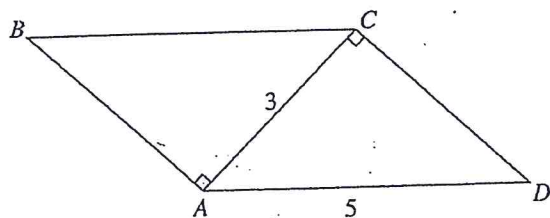


5. In the figure above, side \overline{AB} of $\triangle ABC$ contains which of the following points?

(A) (3, 2)
 (B) (3, 5)
 (C) (4, 6)
 (D) (4, 10)
 (E) (6, 8)



Note: Figure not drawn to scale.

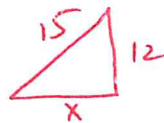
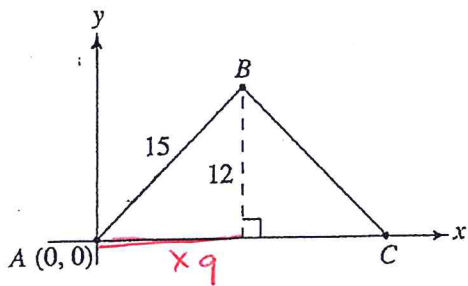
7. In parallelogram $ABCD$ above, $AC = 3$ and $AD = 5$. What is the area of $ABCD$?

(A) 12
 (B) 15
 (C) 18
 (D) 20
 (E) It cannot be determined from the information given.

8. The recipe for a pie recommends that the pie be baked for at least 50 minutes, but not more than 60 minutes. If b is the number of minutes a pie, baked within the recommended time, is baked, which of the following represents all possible values of b ?

(A) $|b - 55| = 5$
 (B) $|b + 55| < 5$
 (C) $|b + 55| > 5$
 (D) $|b - 55| < 5$
 (E) $|b - 55| > 5$

10. When n is divided by 5, the remainder is 4. When n is divided by 4, the remainder is 3. If $0 < n < 100$, what is one possible value of n ?



$$\begin{aligned}x^2 + 12^2 &= 15^2 \\x^2 + 144 &= 225 \\x^2 &= 81 \\x &= 9\end{aligned}$$

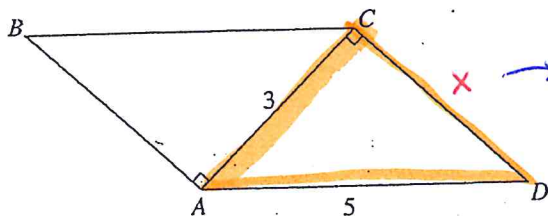
5. In the figure above, side \overline{AB} of $\triangle ABC$ contains which of the following points?

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(B) (3, 5)
(C) (4, 6)
(D) (4, 10)
(E) (6, 8)

this is the only point on the line $y = 4/3x$

$$\text{slope of } \overline{AB} = \frac{12}{9} = \frac{4}{3}$$

$$\begin{aligned}\text{eq of } \overline{AB} &\Rightarrow y = \frac{4}{3}x \\y/x &= \frac{4}{3}\end{aligned}$$



Note: Figure not drawn to scale.

$$\begin{aligned}5^2 &= 3^2 + x^2 \\25 &= 9 + x^2 \\x^2 &= 16 \rightarrow x = 4\end{aligned}$$

Area of \triangle -gram = $l \cdot w$ or $b \cdot h$
if 3 is the height then \overline{CD} is the base

7. In parallelogram $ABCD$ above, $AC = 3$ and $AD = 5$. What is the area of $ABCD$?

- (A) 12
(B) 15
(C) 18
(D) 20
(E) It cannot be determined from the information given.

$$A = (3)(4) = 12$$

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(C) $|b + 55| > 5$
(D) $|b - 55| < 5$
(E) $|b - 55| > 5$

minimum 50 min middle 55 min maximum 60 min
Time must be within 5 min of 55 min

10. When n is divided by 5, the remainder is 4. When n is divided by 4, the remainder is 3. If $0 < n < 100$, what is one possible value of n ?

19, 39, 59, 79, 99