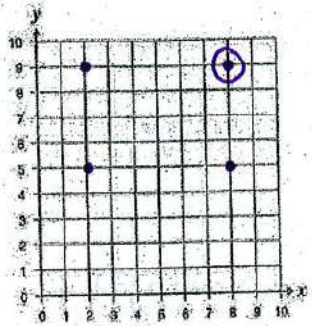
Name Key

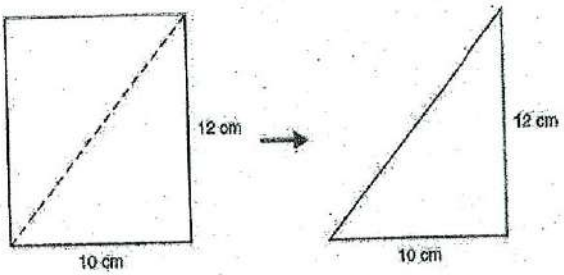
B 1. Chris is designing a rectangular garden plot on a piece of grid paper. He has marked three of the corners of the plot as shown.



Which ordered pair names where Chris should add a point to represent the fourth corner of the rectangle?

A. (8, 1)
(B.) (8, 9)
C. (9, 8)
D. (9, 9)

C 2. Ana cuts a rectangle into 2 pieces as shown below.



What is the area of the triangle?

A. 11 cm^2
B. 22 cm^2
(C.) 60 cm^2
D. 120 cm^2

$A = bh \div 2$
$A = 10 \cdot 12 \div 2$
$A = 60 cm^2$

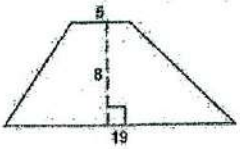
B 3. Triangle XYZ is graphed on a coordinate plane at points $X(3, -4)$, $Y(3, 2)$, and $Z(7, -4)$. What is the area of triangle XYZ?

A. 10 units^2
(B.) 12 units^2
C. 24 units^2

Use the coordinate plane on #12 to help.

$A = bh \div 2$
$A = 4 \cdot 6 \div 2$
$A = 12u^2$

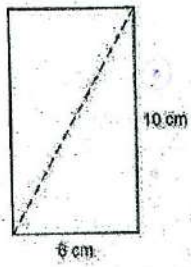
B 4. What is the area, in square units, of the trapezoid?

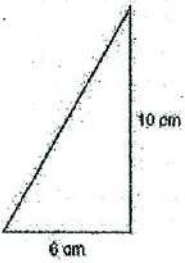


$A = h \div 2 (b_1 + b_2)$
$A = 8 \div 2 (19 + 5)$
$A = 96$ sq. units

A. 76
B. 96
C. 112
D. 152

C 5. Ana cut a rectangle into 2 pieces as shown below.





What is the area of the triangle?

A. $8\ cm^2$
B. $16\ cm^2$
C. $30\ cm^2$
D. $60\ cm^2$

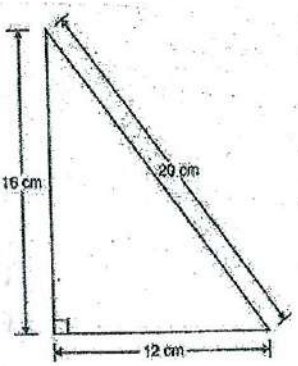
$A = bh \div 2$
$A = 6 \cdot 10 \div 2$
$A = 30\ cm^2$

C 6. Rectangle *EFGH* has three vertices at *E*(−5, 4), *F*(3, 4), and *G*(3, 7). What are the coordinates of vertex *H*?

A. (7, 5)
B. (−5, 3)
C. (−5, 7)

* Use the coordinate plane on #12 to help. *

B 7. The dimensions of a right triangle are shown



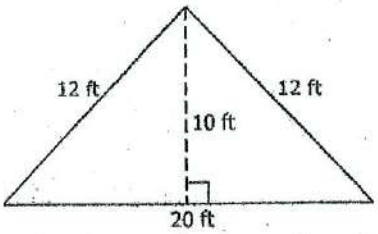
What is the area of the triangle?

A. 48 square centimeters
B. 96 square centimeters
C. 192 square centimeters
D. 256 square centimeters

$A = bh \div 2$
$A = 12 \cdot 16 \div 2$
$A = 96\ cm^2$

C 8. What is the area of the triangle below?

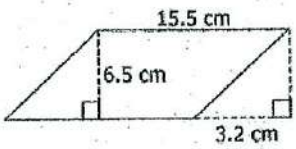
A. 54 ft²
B. 60 ft²
(C.) 100 ft²
D. 200 ft²



$A = bh \div 2$
$A = 20 \cdot 10 \div 2$
$A = 100 ft^2$

B 9. What is the area of the parallelogram below?

A. 79.95 cm²
(B.) 100.75 cm²
C. 111.15 cm²
D. 121.55 cm²

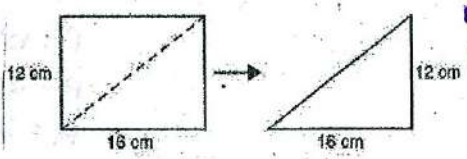


$A = bh$
$A = 15.5 \cdot 6.5$
$A = 100.75 cm^2$

C 10. Nabil cuts a rectangle into 2 pieces as shown below.

What is the area of the triangle?

A. 14 cm²
B. 28 cm²
(C.) 96 cm²
D. 192 cm²

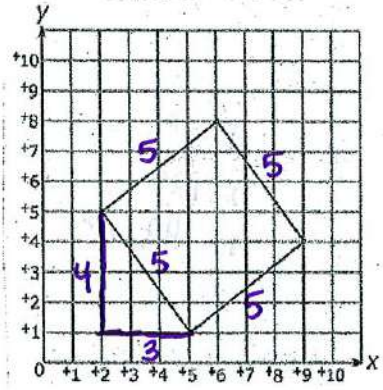


$A = bh \div 2$
$A = 16 \cdot 12 \div 2$
$A = 96 cm^2$

B 11. The figure below is formed from a triangle and a square. The square has sides that measure 5 units.

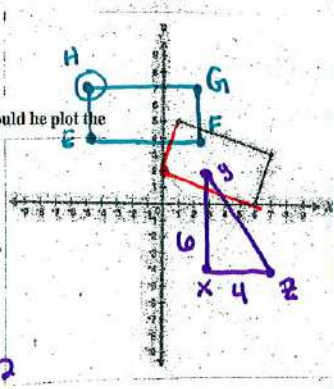
What is the perimeter of the entire figure?

A. 20 units
(B.) 22 units
C. 25 units
D. 27 units



$P = 5+5+5+4+3$
$P = 22 \text{ units}$

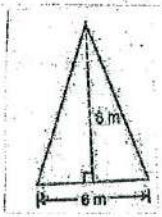
B 12. Jeff plotted some points on a coordinate graph and connected the points.



He realized that one more point would complete a parallelogram. Where should he plot the point?

A. (2, 0)
B. (0, 2)
C. (1, 2)
D. (2, 1)

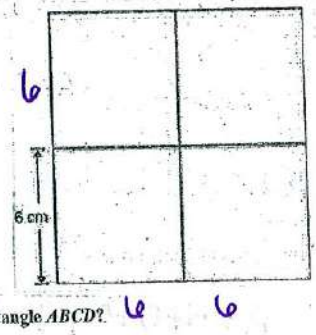
B 13. What is the area in square meters of the triangle below?



A. 14
B. 24
C. 36
D. 48

$A = bh \div 2$
$A = 6 \cdot 8 \div 2$
$A = 24m^2$

D 14. The figure below is divided into four small squares. The sides of each small square are 6 cm long.



What is the area, in square centimeters, of the entire figure?

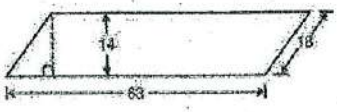
A. 36
B. 48
C. 72
D. 144

$A = s^2$
$A = 12^2$
$A = 144cm^2$

C 15. If the area of Triangle *ABD* is 12 square units, what is the area of Rectangle *ABCD*?

A. 6 square units
B. 12 square units
C. 24 square units
D. 48 square units

C 16. What is the area, in square units, of the parallelogram below?



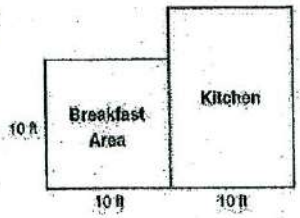
A. 154
B. 162
C. 882
D. 1134

$A = bh$
$A = 63 \cdot 14$
$A = 882u^2$

B 17. Mariel is setting tile on the floors of her rectangular kitchen and square breakfast area. The diagram shows the dimensions of the 2 rooms. Each tile covers 1 square foot.

Find the area of each room, and add them together.

Breakfast
$A = s^2$
$A = 10^2$
$A = 100 ft^2$



Kitchen
$A = lw$
$A = 10 \cdot 14$
$A = 140 ft^2$

140
+100
240

If each tile costs $1.29, how much will Mariel pay to buy tile for both rooms?

A. $269.00
B. $309.60
C. $1,946.00
D. $1,986.60

240
×1.29
$309.60

B 18. A square is 3.2 millimeters (mm) on each side. What is the area of the square?

A. $6.4\ mm^2$
B. $10.24\ mm^2$
C. $12.8\ mm^3$
D. $32.77\ mm^2$

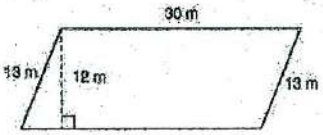
$A = s^2$
$A = 3.2^2$
$A = 10.24 mm^2$

D 19. Laura framed her rectangular garden with boards. She used 1 board on each side. The longer sides were 7.5 feet long, and the shorter sides were 6.5 feet long. What is the area of her garden in square feet?

A. 14
B. 28
C. 42.25
D. 48.75

$A = lw$
$A = 7.5 \cdot 6.5$
$A = 48.75 ft^2$

A 20. The measurements for the parallelogram are given in meters.



$A = bh$
$A = 30 \cdot 12$
$A = 360 m^2$

What is the area of this parallelogram, in square meters?

A. 360
B. 390
C. 516
D. 750