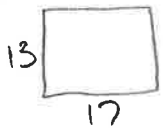
Name: KEY Period: _____ Date: _____

7th Grade Test REVIEW– Circles & Composite Figures

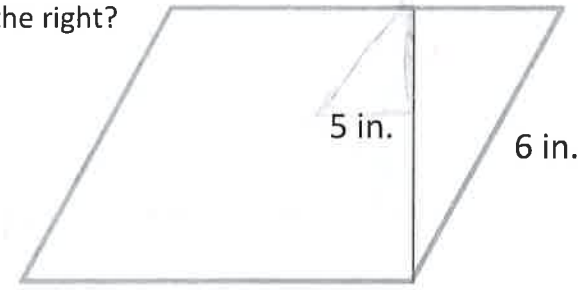
1. Jennifer is painting a picture. Her canvas is 17 inches wide and 13 inches tall. How many square inches is the area of her canvas?



$A = bh$
$A = 17 \cdot 13$
$A = 221\ in^2$

2. What is the area of the shape to the right?

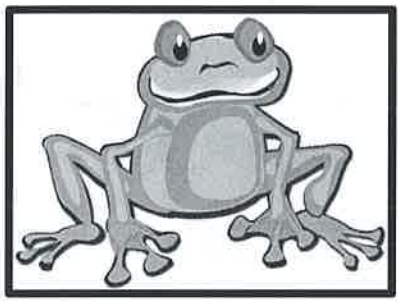
$A = bh$
$A = 8 \cdot 5$
$A = 40\ in^2$



3. Katie wants to put a wood frame *around* picture she just took. If the area of the picture is 24 square inches, how much wood will she need?

$A = bh$
$24 = 4b$
$\frac{24}{4} = \frac{4}{4}b$
$b = 6$

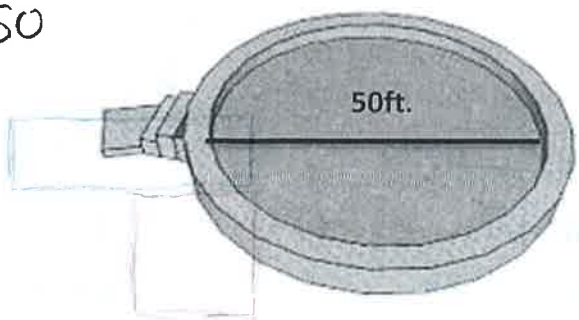
$A = 24$
$h = 4$
$b = ?$



4. Kate got a circular swimming pool with a diameter of 50 feet. She wanted to know about how many feet the circumference of her pool is. What is the circumference of the pool?

$C = \pi d$
$C = 3.14 \cdot 50$
$C = 157\ ft$

$d = 50$



5. The area of a triangle is $108in^2$. If the height is 9 inches, what is the measure of the base?

$A = 108$
$h = 9$
$b = ?$

$A = \frac{1}{2}bh$
$108 = \frac{1}{2} \cdot 9 \cdot b$
$\frac{108}{4.5} = \frac{4.5b}{4.5}$
$b = 24\ in$

6. A bicycle wheel has a diameter of 8 inches. What is the circumference?

$C = \pi d$
$C = 3.14 \cdot 8$
$C = 25.12\ in$

7. What is the diameter on a circle that has a circumference of 213.52 meters?

$C = \pi d$
$C = 213.52$
$d = ?$

$\frac{213.52}{3.14} = \frac{3.14d}{3.14}$
$d = 68\ m$

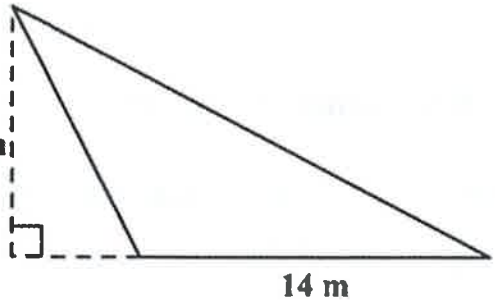
8. What is the area of the triangle?

$A = \frac{1}{2}bh$ $A = \frac{1}{2} \cdot 14 \cdot 10$

$b = 14$

$h = 10$

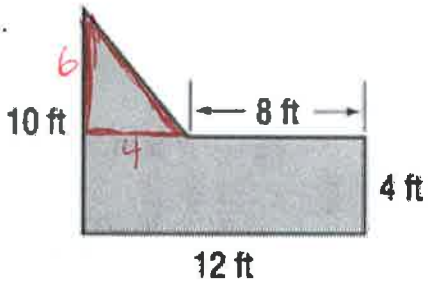
$A = 70\ m^2$



9. Find the area of the composite figure.

$A = bh$ $A = 12 \cdot 4$ $A = 48\ ft^2$

$A = \frac{1}{2}bh$ $A = \frac{1}{2} \cdot 4 \cdot 6$ $A = 12\ ft^2$



$48 + 12 = 60$ ADD AREA OF SHAPES TOGETHER

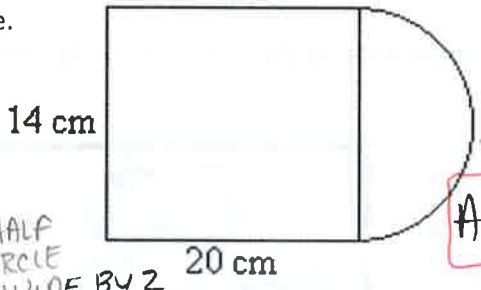
$A = 60\ ft^2$

10. Find the area of the composite figure.

$A = bh$ $A = 20 \cdot 14$ $A = 280\ cm^2$

$d = 14$ $r = 7$

$A = \pi r^2$ $A = 3.14 \cdot 7^2$ $A = 3.14 \cdot 49$ $A = 153.86$ HALF CIRCLE DIVIDE BY 2 $A = 76.93\ cm^2$



$280.00 + 76.93$

$A = 356.93\ cm^2$

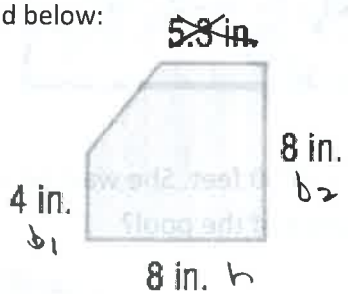
11. Calculate the area of the trapezoid below:

$A = \frac{1}{2}(b_1 + b_2)h$

$A = \frac{1}{2}(4 + 8)8$

$A = \frac{1}{2} \cdot 12 \cdot 8$

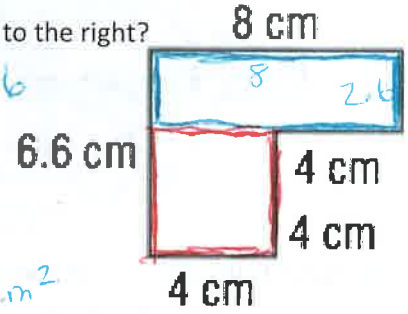
$A = 48\ in^2$



12. What is the area of the figure to the right?

$A = bh$ $A = 4 \cdot 4$ $A = 16\ cm^2$

$A = bh$ $A = 8 \cdot 2.6$ $A = 20.8\ cm^2$



$20.8 + 16.0$

$A = 36.8\ cm^2$

13. Find the area of the circle.

$A = \pi r^2$

$A = 3.14 \cdot 4.7^2$

$A = 3.14 \cdot 22.09$

$A = 69.3626\ yd^2$