#3 car

Name:

MEMORIES FROM BOOT CAMPS
1,2,3,4

1) Figure A and figure B differ by a scale factor. What scale factor has been applied to figure A to produce figure B?

Figure A

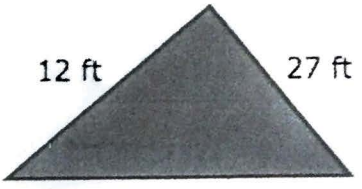
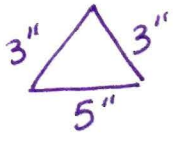


Figure B

$\frac{\text{new}}{\text{original}}$ $\frac{12}{4} = \frac{3}{1}$

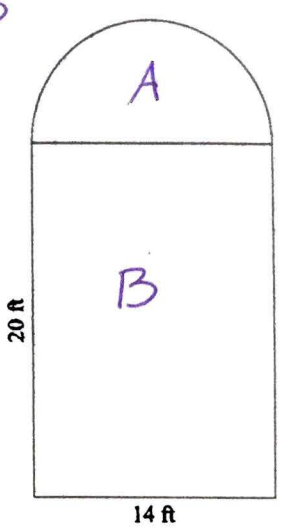
2) Draw a triangle with side lengths of 3 in. 5 in. and 3 in. Is your answer a unique triangle?



yes, only one tri can be drawn with the given 3 side lengths.

3) JAMIE WOULD LIKE TO CARPET ~~HIS~~ HER WEIRD LOOKING BEDROOM. HOW MANY SQUARE FEET OF CARPET DOES SHE NEED?

$A = \frac{\pi r^2}{2} = \frac{(3.14)(49)}{2} = \frac{153.86}{2} = 76.93$



$B = bh$

$(14)(20)$

$280\ ft^2$

$280 + 76.93 =$

$356.93\ ft^2$

4) A CIRCLE HAS A DIAMETER OF 14 INCHES. WHAT IS ITS AREA?

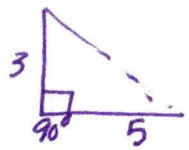
$153.86\ in^2$

$A = \pi r^2$

$= (3.14)(7)(7)$

$= 153.86\ in^2$

5) IS IT POSSIBLE TO DRAW A TRIANGLE WITH A 90 DEGREE ANGLE WITH ONE SIDE MEASURING 5 INCHES AND ONE SIDE MEASURING 3 INCHES LONG? WHY OR WHY NOT? YOU MAY USE A DRAWING TO EXPLAIN.



yes.

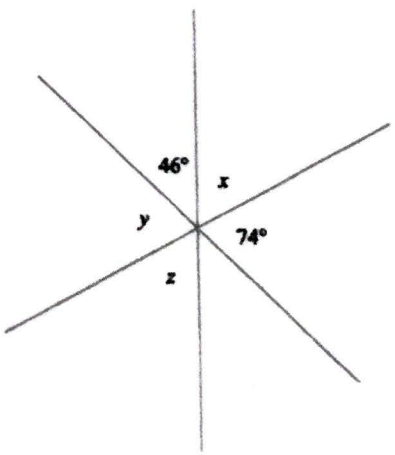
6) WHAT ARE THE MEASUREMENTS FOR ANGLES X, Y AND Z? SHOW HOW YOU GOT YOUR ANSWERS.

$74 + 46 = 120°$

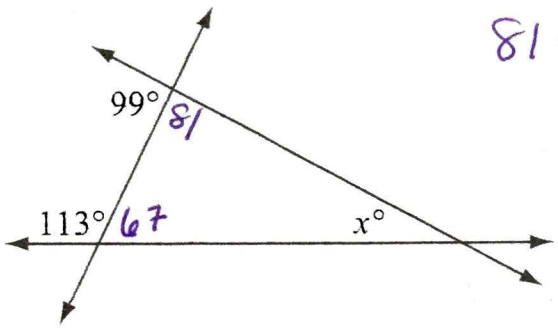
X $180 - 120 = \boxed{60°}$

$y = 74°$ → Vertical.

z is vertical to $x = 60°$



7) The diagram below shows three lines that intersect to form a triangle.



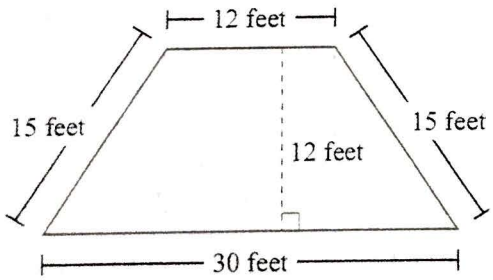
$81 + 67 = 148$

$180 - 148 = 32^\circ$

Based on the angle measures in the diagram, what is the value of x?

A. 32
B. 67
C. 81
D. 99

8) 15 Mr. Kramer's patio is in the shape of a trapezoid. The trapezoid and its dimensions are shown below.



What is the area of the patio?

A. 144 square feet
B. 252 square feet
C. 315 square feet
D. 360 square feet

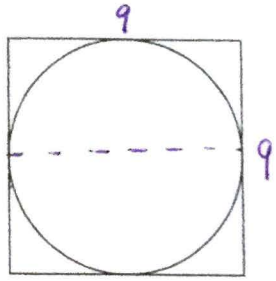
Your organized work here:

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

$\frac{12 + 30}{2}(12) = \frac{504}{2} =$

252 ft^2

9) A circle inscribed in a square is shown below.



The area of the square is 81 square centimeters.

Which of the following is closest to the circumference, in centimeters, of the circle inscribed in the square? (Use 3.14 for π.)

A. 14.13
B. 28.26
C. 63.59
D. 127.17

Your organized work here:

$C = \pi d$

$= (3.14)(9)$

$C = 28.26$

10) WHAT ANGLE IS SUPPLEMENTARY TO 147.5 °?

$180 - 147.5 = 32.5^{\circ}$