

Solve the following equations:

1)  $-4(x + 2) = 12$

2)  $\frac{x-4}{3} = 5$

Solve and graph the following inequalities.

2)  $-3x + 7 \geq 16$

3)  $-2(3x - 5) < -20$

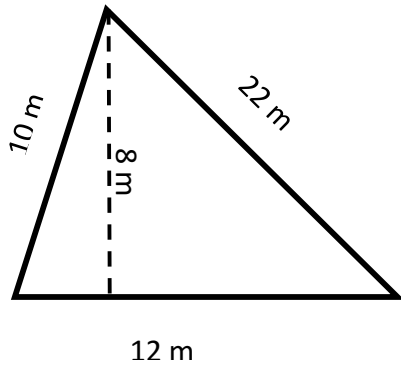


4) Explain why the following side lengths will create a triangle.  
*14 cm, 22 cm, and 18 cm*

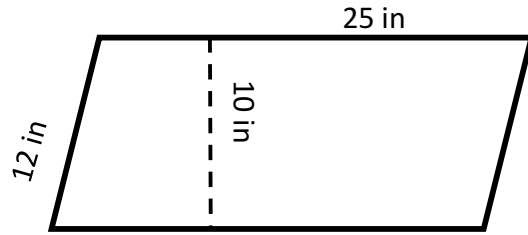
5) Explain why the following angles will not create a triangle.  
*45°, 90°, and 30°*

Find the area of the following figures.

6)



7)



8) Use the pattern to fill in the blanks.

$$\frac{1}{9} = 0.1111111 \dots$$

$$\frac{2}{9} = 0.222222 \dots$$

$$\frac{3}{9} = 0.33333 \dots$$

$$\frac{4}{9} = 0.44444444 \dots$$

$$\frac{5}{9} = 0.55555 \dots$$

$$\frac{6}{9} = \underline{\hspace{2cm}}$$

$$\frac{7}{9} = \underline{\hspace{2cm}}$$

$$\frac{8}{9} = \underline{\hspace{2cm}}$$

$$\frac{9}{9} = \underline{\hspace{2cm}}$$

9) Evaluate the equation  $2lw + 2lh + 2wh$  if  $l = 3$ ,  $w = 4$ , and  $h = 5$ .

10) Is a  $a$  or  $b$  the height of the triangle? Why is that the height?

