

homework 6-14 through 6-19

6-14

$$a = 97^\circ \quad b = 15^\circ \quad c = 68^\circ \quad d = 68^\circ$$

6-15

$$a) \tan 58 = \frac{6}{x}$$

$$x \approx 3.75$$

$$b) x = 7\sqrt{2}$$

45-45-90 ratios

~~c)~~

6-16

$$a) \frac{4}{10} = \frac{10}{x}$$

$$100 = 4x$$
$$\boxed{25 = x}$$

$$k = 2.5$$

b)

$$\frac{40 + 16}{\boxed{56 \text{ in}^2}}$$

$$\frac{250 + 100}{\boxed{350 \text{ in}^2}}$$

$$k = 6.25$$

6-18

.8 heads .2 tails

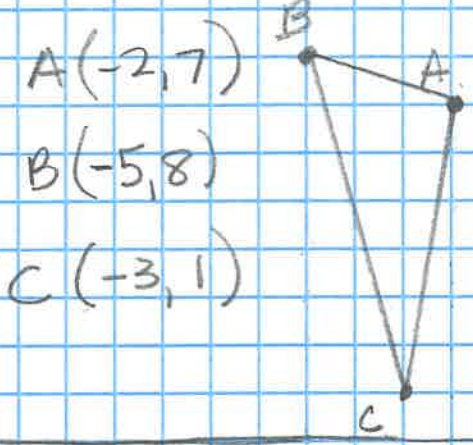
a) $P(\text{do both chores}) = (.8)(.8) = .64 = 64\%$

b) $P(\text{one of the chores}) = (.8)(.2) = .16 = 16\%$

6-19

A

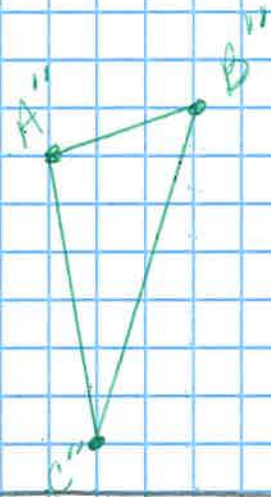
6-17



$A(-2, 7)$

$B(-5, 8)$

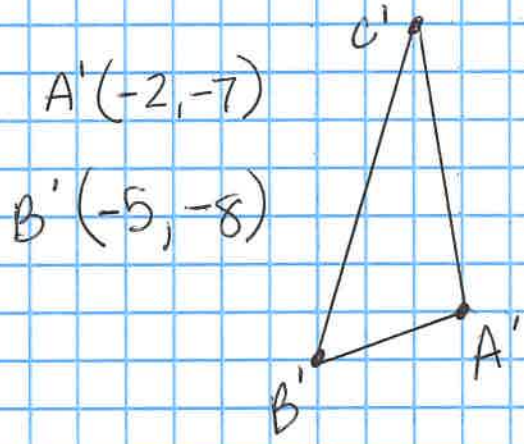
$C(-3, 1)$



$A''(2, 7)$

$B''(5, 8)$

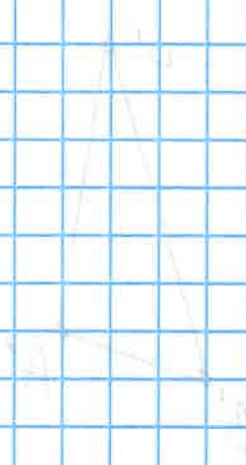
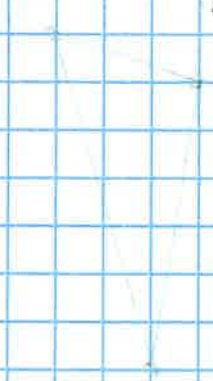
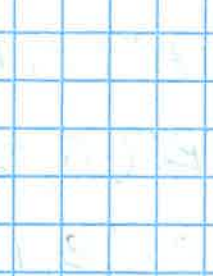
$C''(3, 1)$



$A'(-2, -7)$

$B'(-5, -8)$

c) Reflection across y-axis



$$(12 \cdot 4) \div 2$$

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