Homework 7-65 to 7-71

7-65

$4x - 1 = x + 8$

$3x = 9$

$x = 3$

$5y + 2 = 22$

$5y = 20$

$y = 4$

$4(3) - 1 = 11$

$\overline{AB} = 22$

7-66

a) .8

b) $1200(.8)^3$

$\$614.40$

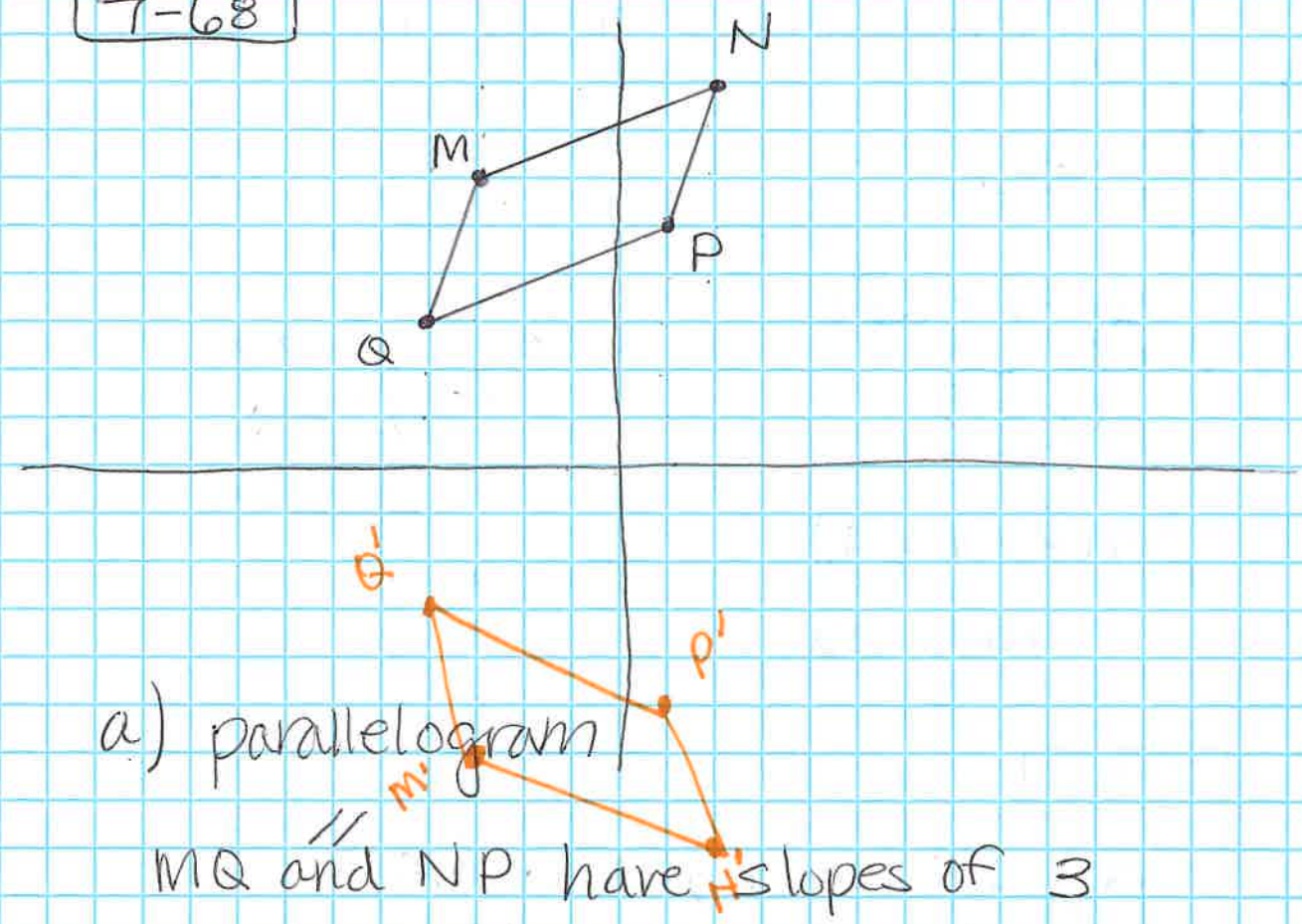
c) $1200(.8)^{-2} = \$1875$

7-67

a) $\angle a = 36°$ (reflection of x)
$\angle r = 54°$ (Triangle sum)
$\angle m = 54°$ (reflection of r)
$\angle y = 72°$ (straight angle)
$\angle z = 108°$ (straight angle)

b) Since $\angle y$ and $\angle z$ are supplementary. Same Side Interior

7-68



a) parallelogram

$\overline{MQ}$ // $\overline{NP}$ have slopes of 3

$\overline{MN}$ // $\overline{QP}$ because both have slopes of $\frac{2}{5}$

b)

$(x, y) \rightarrow (x, -y)$

M (-3, 6) → M' (-3, -6)

N (2, 8) → N' (2, -8)

P (1, 5) → P' (1, -5)

Q (-4, 3) → Q' (-4, -3)

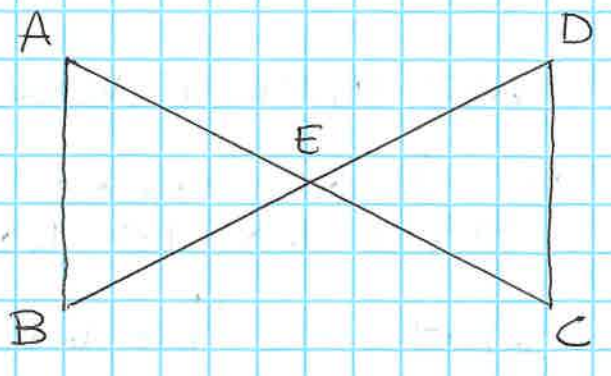
P'(1, -5)

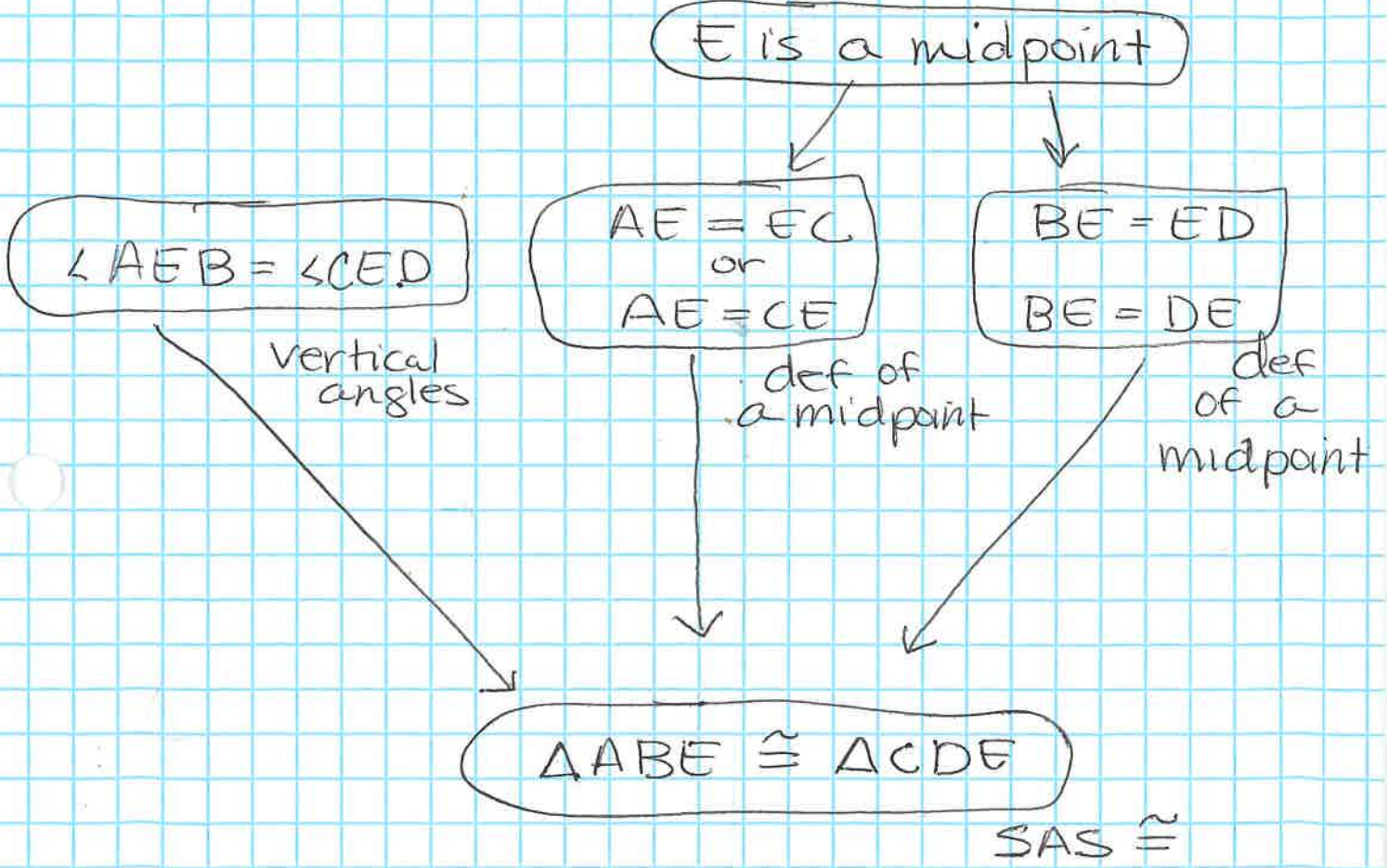
Rule for reflecting over x-axis

$(x, y) \rightarrow (x, -y)$

7-69

Given: E is the midpoint

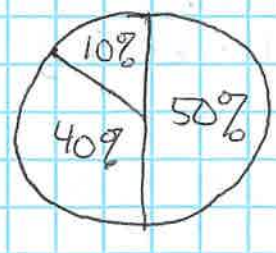




7-70

a) Blue would be 50% because the spinner needs to add up to 100%

b)



Blue is 180°
Red is 144°
White is 36°

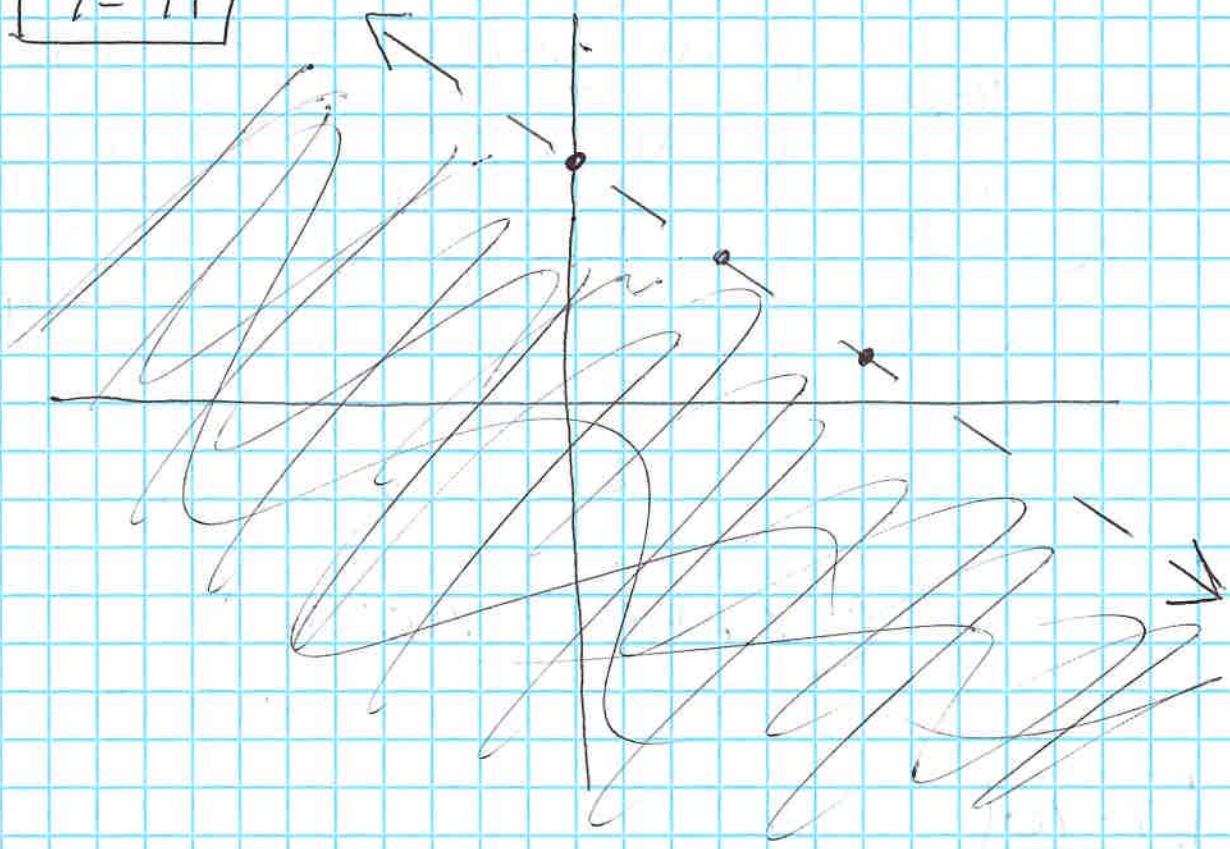
c) My answer would be no

if Blue takes 50% Red 40%
and White 10%

that is the whole circle.

Maybe I'm misunderstanding the question

7-71



$y < -\frac{2}{3}x + 5$ (Sketch the boundary)

(dotted because boundary is NOT included)

Test a point to see where solutions are.

(0,0) → $0 < 5$ is true So shade left side