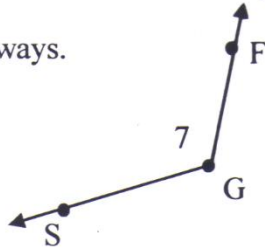


# MATH 2 CHAPTER 5 PRACTICE QUIZ #9

Answer Key

1. Name the angle 4 different ways.



\* Don't forget the angle symbol ( $\angle$ )

- $\angle G$
- $\angle 7$
- $\angle FGS$
- $\angle SGF$

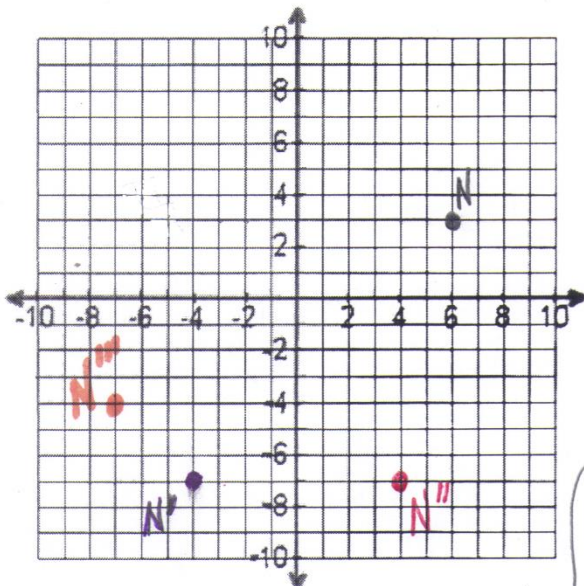
2. A plastic box contains 12 red blocks, 16 blue blocks, 7 green blocks, 10 black blocks, 14 yellow blocks, and 11 purple blocks. If you reach into the plastic box and randomly choose a block, what is the probability you will get the following: 70 blocks total

$P(\text{green block}) = \frac{7}{70}$  or  $\frac{1}{10}$  or  $10\%$     
  $P(\text{block}) = \frac{70}{70} = \frac{1}{1} = 100\%$     
  $P(\text{pink block}) = \frac{0}{70} = 0\%$   
 $P(\text{red block and blue block}) = \frac{12+16}{70} = \frac{28}{70}$  or  $\frac{2}{5}$  or  $40\%$     
 $P(\text{Not a yellow block}) = 1 - \frac{14}{70} = \frac{56}{70}$  or  $\frac{4}{5}$  or  $80\%$   
 $P(\text{purple block, black block, and green block}) = \frac{11}{70} + \frac{10}{70} + \frac{7}{70} = \frac{28}{70} = \frac{2}{5}$  or  $40\%$

3. Simplify the radicals. Leave as an exact answer. Find the biggest perfect square that goes into it.

(a) $\sqrt{32}$ $\sqrt{16} \cdot \sqrt{2}$ $4\sqrt{2}$	(b) $\sqrt{48}$ $\sqrt{16} \cdot \sqrt{3}$ $4\sqrt{3}$	(c) $3\sqrt{50}$ $3 \cdot \sqrt{25} \cdot \sqrt{2}$ $3 \cdot 5 \cdot \sqrt{2}$	(d) $9\sqrt{147}$ $9 \cdot \sqrt{49} \cdot \sqrt{3}$ $9 \cdot 7 \cdot \sqrt{3}$	(e) $10\sqrt{192}$ $10 \cdot \sqrt{64} \cdot \sqrt{3}$ $10 \cdot 8 \sqrt{3}$
$4\sqrt{2}$	$4\sqrt{3}$	$15\sqrt{2}$	$63\sqrt{3}$	$80\sqrt{3}$

4. Translate point N 10 units left and 10 units down and label it N'. Then reflect N' over the y-axis and label it N''. Rotate N'' 90° CW about the origin and label it N'''.



$N''' = (-7, -4)$

$N(6, 3)$       $N'(-4, -7)$       $N''(4, -7)$

$N'''(-7, -4)$

reflect over x     reflect over y  
 $(x, y) \rightarrow (x, -y)$       $(x, y) \rightarrow (-x, y)$   
 cw 90°     ccw 90°  
 $(x, y) \rightarrow (y, -x)$       $(x, y) \rightarrow (-y, x)$