

HONORS GEOMETRY
OPENING DAY
PACKET
2019-2020

H Geometry
Opening Day Packet – No Calculator Section

Name: _____

I) Multiple Choice

1) Solve the equation $4x - 10 = -42$

- a) -8 b) -13 c) $-\frac{1}{2}$ d) 8

2) Simplify $\sqrt{48a^2b^4}$

- a) $4ab$ b) $4ab^2\sqrt{3}$ c) $16ab\sqrt{3}$ d) $\sqrt{3}$

3) Simplify $\frac{7}{\sqrt{5}}$.

- a) $\sqrt{\frac{7}{5}}$ b) $\frac{\sqrt{5}}{7}$ c) $\frac{7\sqrt{5}}{\sqrt{5}}$ d) $\frac{7\sqrt{5}}{5}$

**II) Short Answer – Show your work for each of the following. No work, no credit.
The process is as important as the answer.**

4) Evaluate $\frac{x-3z}{y}$ if $x=2$, $y=8$ and $z=6$.

5) Evaluate $5|a-5|-7|b+2|$ if $a=4$ and $b=3$.

6) Solve the inequalities, graph your solution on a number line:

a) $12 - h \leq 2h$

b) $-4y > 24$



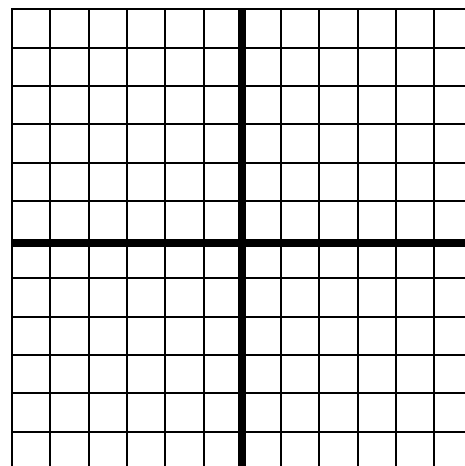
7) What does your solution to #6a say in words?

8) Plot the point $(-3, 2)$ on the grid provided for #9. Label the point A.

9) A) Graph the system of equations. Then determine whether the system has no solutions, one solution or infinitely many solutions. If the system has one solution, name it. (3 pts)

$$\begin{cases} y = -4x + 2 \\ y = x - 3 \end{cases}$$

B) Use the substitution method to solve this system in order to verify your solution from part A.



10) Write four points that satisfy the equation. $y = 2x + 1$

11) Simplify the following:

a) $\sqrt{5} * \sqrt{15}$

b) $\frac{4\sqrt{48}}{2\sqrt{12}}$

c) $3\sqrt{8} - 9\sqrt{18} + 4\sqrt{32}$

d) $9\sqrt{5} - 7\sqrt{5}$

Honors Geometry
Chapter 0 Quiz – Calculator Section

Name: _____

I.) Multiple Choice

12) 1.986 L = _____ mL

- a) 0.1986 b) 19.86 c) 198.6 d) 1986

13) 32 m = _____ yd

- a) 36.7 b) 33.4 c) 32.8 d) 35.2

14) Solve: $-\frac{x}{6.6} + 3 = -13$

- a) 66 b) 105.6 c) -16 d) 67

**II.) Short Answer – Show your work for each of the following. No work, no credit.
The process is as important as the answer.**

15) Sasha bought 2 gallons of chocolate ice cream and 8 pints of toffee crunch ice cream for a party. How many quarts of ice cream does she have? (3 pts)

16) Select the measurement that is not the same value as the other three measurements. **Explain how you know.**

| | | | |
|-----------|-----------|-------------|----------------|
| 30 inches | 2.5 yards | 0.75 meters | 75 centimeters |
|-----------|-----------|-------------|----------------|

17) Solve the system of equations using elimination: $\begin{cases} x - 5y = 2 \\ 2x - 9y = 6 \end{cases}$ (4 pts)

18. Simplify:

a) $-2\sqrt{108}$

b) $\frac{\sqrt{5}}{2\sqrt{10}}$

19. Simplify:

$$(\sqrt{6} - 4)(2\sqrt{2} + \sqrt{6})$$