

Pythagoras Intro homework

- 1) They didn't want to listen to Pythagoras originally because they just thought he was a young boy who didn't know anything. He might mess things up.
- 2) Pythagoras found a rope and tied knots (equal distance apart). He discovered that if the two legs are squared and added together, the sum is equal to the larger square. $a^2 + b^2 = c^2$
- 3) He wanted to help make ^{the} bases of the column straight.

4) Answers may vary.

5) $a^2 + b^2 = c^2$

6)

$$\sqrt{64} < \sqrt{79} < \sqrt{81}$$

$$8 < \sqrt{79} < 9$$

The $\sqrt{79}$ is between 8 and 9.

7) 0.5555...

5 ← repeating digit

9 ← # of 9's depends on
of digit repeating

8) 9.3×10^7

9.30000000

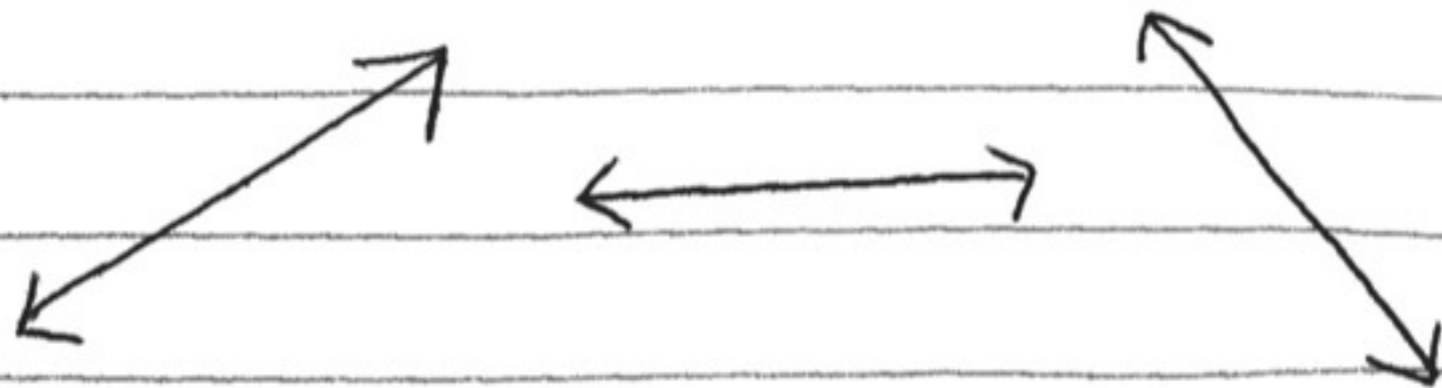
$$\begin{aligned}
 9) \quad & -3(2x+1) + 3x = 6x + 3 \\
 & \underline{-6x - 3} + 3x = 6x + 3 \\
 & -3x - 3 = 6x + 3 \\
 & -3x - 3 - 6x = 6x + 3 - 6x \\
 & -9x - 3 = 3 \\
 & -9x - 3 + 3 = 3 + 3 \\
 & -9x = 6 \\
 & \frac{-9x}{-9} = \frac{6}{-9} \\
 & \boxed{x = -\frac{2}{3}}
 \end{aligned}$$

$$\begin{aligned}
 10) \quad & 8.1 \times 10^6 + 3.8 \times 10^6 \\
 & \underline{8100000} + \underline{3800000} \\
 & 11900000 \quad \text{or } 1.19 \times 10^7
 \end{aligned}$$

$$\begin{aligned}
 11) \quad & -3.5x + y = 8 \\
 & y = 3.5x + 8 \\
 & m = 3.5 \text{ or } \frac{7}{2} \\
 & b = 8
 \end{aligned}$$

$$\begin{aligned}
 12) \quad & \text{Answers will vary.} \\
 & y = x^2 + 1 \\
 & y = x^3 - 3 \\
 & x^3 + y = 4
 \end{aligned}$$

13



14) Vertical line Test / Pencil Test