

Key

tc core 102: Quiz 3

There are two sides to this quiz. You can use a calculator and a three-sided 3x5" notecard with anything written or typed on it.

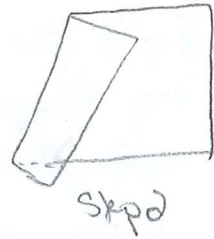
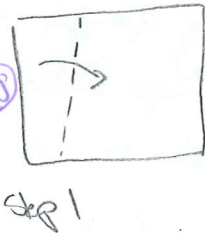
- [2] (10/7 Discussion) Name at least one campus support that you can use if you experience test anxiety.

resource (+)
at UWT (+)

The counseling center on campus in the Mattress Factory.
 The special accommodations (Disability Resource Center) also in the Mattress Factory.
 The meditation room @ the MICA
 The Teaching + Learning Center is likely to have practical ideas too.

- [2] (Lang41-51) There were multiple elephant designs presented in Section 3 of Lang's book beginning with a "one fold" design. Either make the "one fold" design or draw the directions below.

sketch (+.5)
 directions of some kind (+)
 elephants from text (+)



- [4] (Lang41-51) What was the point Lang was making in Section 3 of his text?

Origami design has to balance details with level of complexity of the pattern.

sketch (+.5)
 in Lang §3 (+1)
 sense (+.5)
 on origami/tree (+)
 got the point (+)

- [3] (10/11 lecture) Did Pythagorus use paper when doing mathematics? Why or why not.

No. Paper wasn't invented yet. :)

5. [3] (ViHart Video) Pythagorus and his cult approached mathematics and numbers quite different than we do today. Describe one such difference mentioned by ViHart.

start (H)
true (H)
founded (H)

Numbers were defined & didn't "live up" on a number line as we do today.

The Pythagoreans did not use algebra as we do. In particular a^2 was not $a \cdot a$ (like we think) but a square whose length and width were both a .

6. [6] (Activity4#2) Let l be a line on a patty paper and X a point on l . Give instructions (using patty paper rules!!!) to build a line perpendicular to l that passes through X .

Begin with a line l and a point X on the line like shown in Figure 1

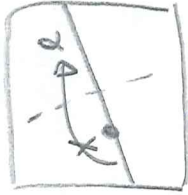


Figure 1

1) Fold the patty paper so that l on the top flap lines up with l on the bottom and the crease is on X . See Figure 2.



Figure 2

2) Unfold. The new fold is exactly a line \perp to l that passes through X .

start (H)

clarity of steps
instructions (H)

does the process
work (H)

order steps 1, 2
pictures 1, 2
words 1, 2

Begin with a line l and a point X on the line like shown in Fig 1



Figure 3

1) Take a second patty paper and line up one outside edge of the 2nd patty paper with line l .

2) Slide the edge of the 2nd patty paper along l until the corner lines up with X . (Figure 2 & 3)

3) Take the edge (b) in figure 3 from the 2nd patty paper to create the line \perp to l that

passes through X . (Recall that we can assume patty paper is square & so the angle we traced is 90° .)

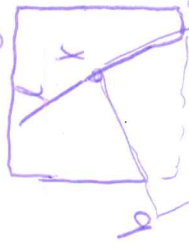


Figure 3