

tcore 102: Midterm

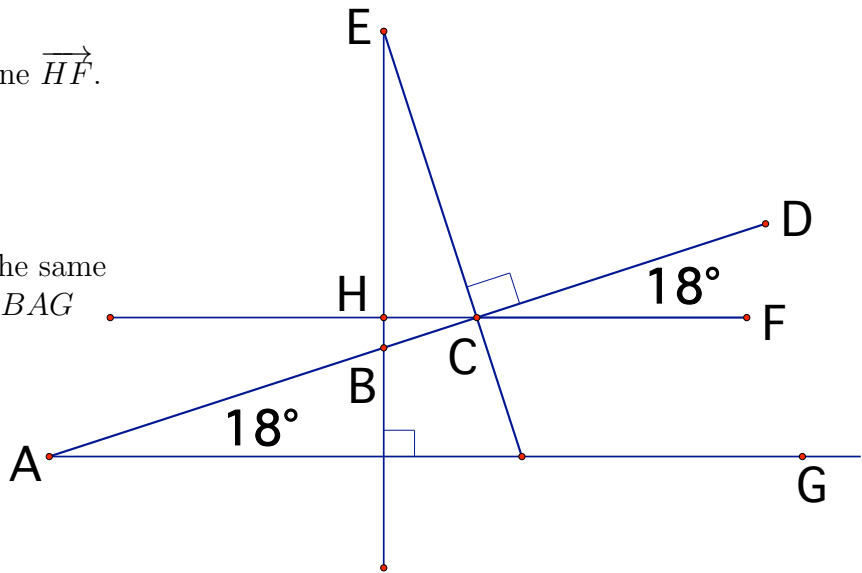
You can use a calculator & a 4-sided 3×5" notecard with anything written or typed on it.

- [6] TRUE/FALSE: Refer to the diagram below when answering the following questions. Note that \overline{HF} is parallel to \overline{AG} . If true, circle T, otherwise circle F. Then explain briefly justify your answer.

T F The point C is on the ray \overrightarrow{AB} .

T F C is on the line \overleftrightarrow{HF} .

T F $\angle HCB$ has the same measure as $\angle BAG$



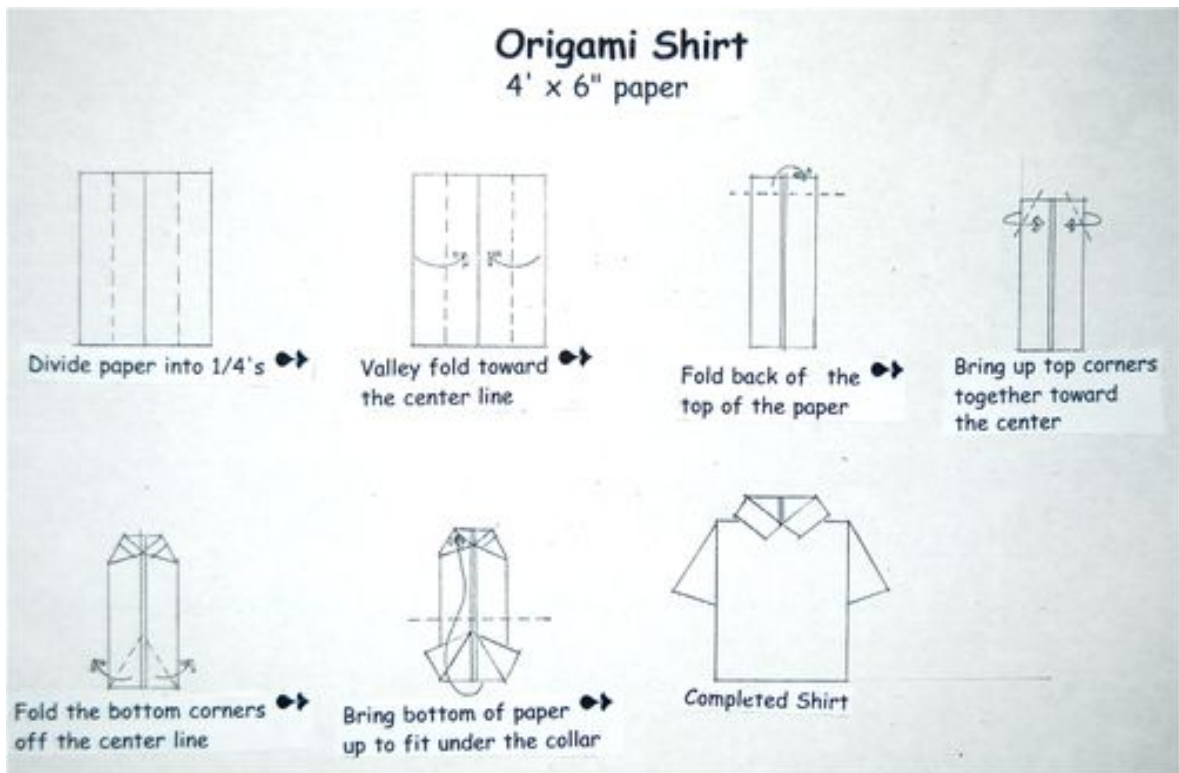
- [2] Identify a transversal line to \overline{HF} and \overline{AG} .

- [2] Identify a pair of alternating exterior angles with respect to the transversal you found above.

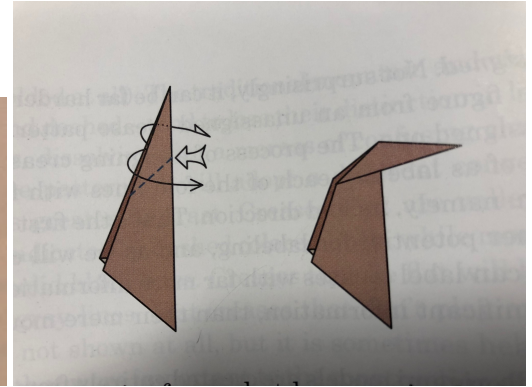
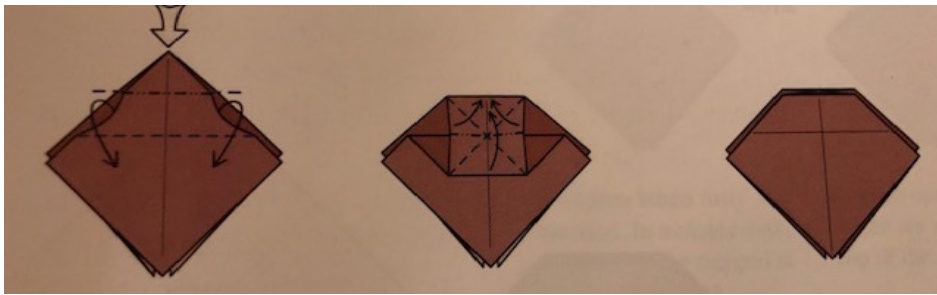
4. [3] (Quiz2 #4) Recall the reading "A Mathematician's Lament" by Paul Lockhart. Briefly describe one of the nightmares.

5. [4] (ViHart Video) Describe how Pythagorus and his cult thought of numbers and how that differs from the way people today do.

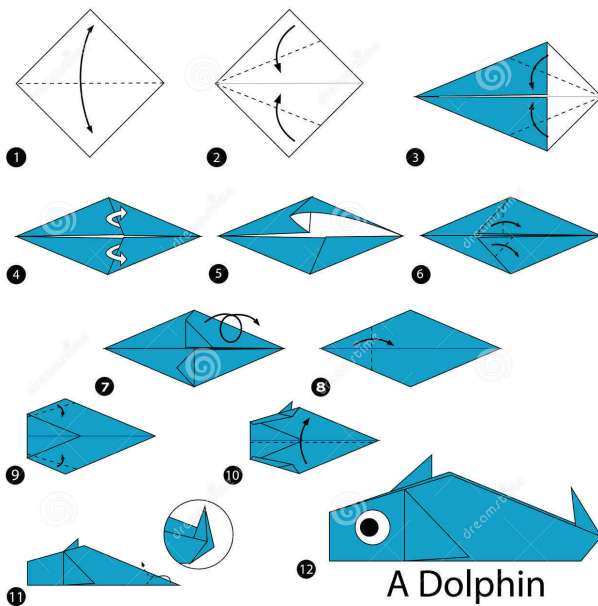
6. [4] (quiz2) Follow the directions below to fold a shirt.



7. [4] (Quiz1 #5 & HW2) Name each kind of fold that is shown:

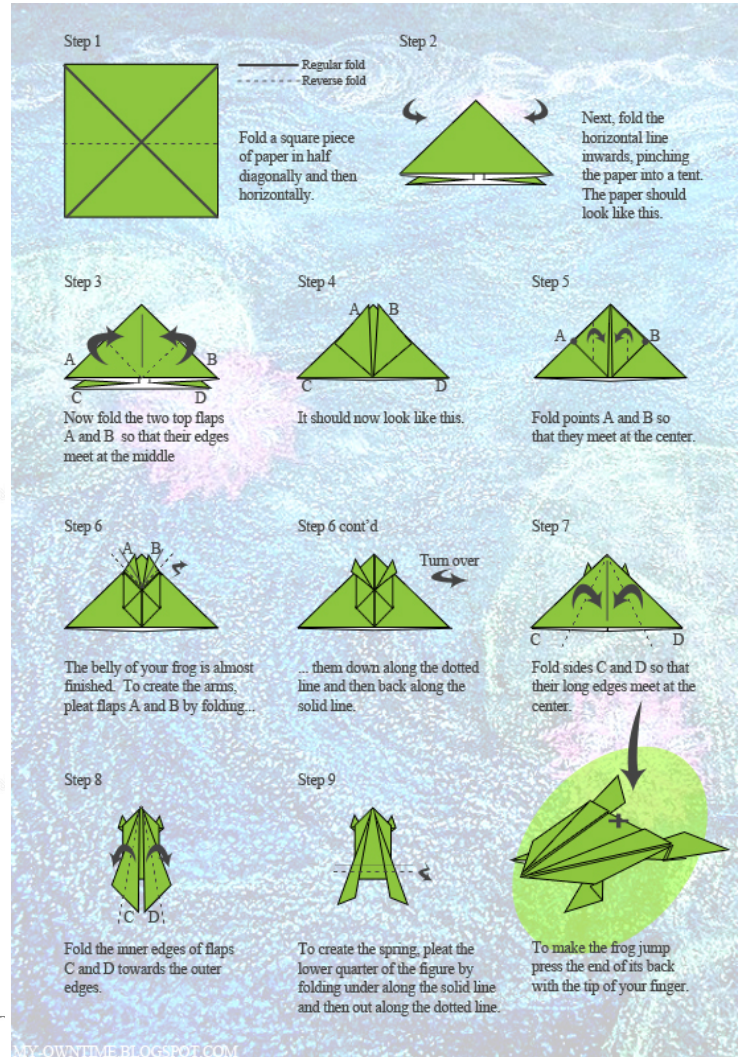


8. [4] (Lang §4) Identify the base that each origami pattern makes use of (note that there may be more than one correct answer).



A Dolphin

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9. (Technical Communication Today)

(a) [4] Identify a guideline given in Technical Communication Today that you don't think applies in a Literary Review. Justify yourself.

(b) [2] (10/21 Lecture) Name a guideline from the Technical Communication Today readings that is appropriate for verbal presentations.

10. [3] (Journal12, Lecture 10/7, Quiz3#1) Identify any techniques/skills/information thus far introduced in this class that you can transfer/use in other/future classes.

11. [2] What concept did you study for and not see on this exam?

12. Group Question (only one copy needs to be turned in per group): We will investigate how many triangles we can make with creases while folding. For example, notice that there are three folds made while creating the kite base which yields several triangles when unfolded. Find the maximum number of triangles you can create on a crease pattern using only eight folds. Your answer should include:
- (a) [5] Instructions for how to create the crease pattern with the maximal number of triangles, and
 - (b) [5] Justification for why you believe you've found the maximum number of possible triangles on a crease pattern.