

CS-5340/6340, Written Assignment #1, SOLUTIONS

1. (40 pts, 1/2 pt per word) For each sentence below, label each word with its correct part-of-speech (POS) tag based upon the word's use in the sentence. Punctuation should be ignored. Choose from the following list of part-of-speech tags: **adjective** (ADJ), **adverb** (ADV), **article** (ART), **conjunction** (CONJ), **gerund** (GER), **infinitive “to”** (INF), **modal** (MOD), **noun** (NOUN), **particle** (PART), **preposition** (PREP), **personal pronoun (not possessive)** (PERPRO), **possessive pronoun** (POSSPRO), **relative pronoun** (RELPRO), **verb** (VERB).

For infinitive verb phrase constructions, label “to” as INF and the verb itself as VERB.

NOTE: An easy way to show your part-of-speech tags is to append a slash and POS tag after each word. For example: “Natural/ADJ language/NOUN is/VERB fun/ADJ.”

- (a) Dan slid sideways down the hill and broke out in laughter.

Dan/NOUN slid/VERB sideways/ADV down/PREP the/ART hill/NOUN and/CONJ broke/VERB out/PART in/PREP laughter/NOUN.

- (b) Children may like candy but eating sugary foods is unhealthy.

Children/NOUN may/MODAL like/VERB candy/NOUN but/CONJ eating/GER sugary/ADJ foods/NOUN is/VERB unhealthy/ADJ.

- (c) My brother did not plan to take sleeping pills although he got no sleep yesterday.

My/POSSPRO brother/NOUN did/VERB not/ADV plan/VERB to/INF take/VERB sleeping/GER pills/NOUN although/CONJ he/PERPRO got/VERB no/ADJ sleep/NOUN yesterday/ADV.

- (d) He often snores like an aardvark.

He/PERPRO often/ADV snores/VERB like/PREP an/ART aardvark/NOUN.

- (e) Mary ran inside after rain began to fall.

Mary/NOUN ran/VERB inside/ADV after/CONJ rain/NOUN began/VERB to/INF fall/VERB.

- (f) The armed man took off when police showed up.

The/ART armed/ADJ man/NOUN took/VERB off/PART when/CONJ police/NOUN showed/VERB up/PART.

- (g) The kittens sleeping in her lap are very young.

*The/ART kittens/NOUN sleeping/VERB in/PREP her/POSSPRO lap/NOUN are/VERB
very/ADV young/ADJ.*

- (h) She just completed a singing competition, which could make her a star.

*She/PERPRO just/ADV completed/VERB a/ART singing/GER competition/NOUN,
which/RELPRO could/MODAL make/VERB her/PERPRO a/ART star/NOUN.*

2. (20 pts) For each sentence below, indicate whether the main verb appears in an *intransitive* construction, a *transitive* construction, or a *ditransitive* construction. Only give the answer *transitive* if the usage is not *ditransitive*.

(a) The dog barked at the cat.

INTRANSITIVE

(b) The man fed the squirrels peanuts.

DITRANSITIVE

(c) Susan slept for ten hours.

INTRANSITIVE

(d) George broke the window with his fist.

TRANSITIVE

(e) Mary loaned her neighbor a bicycle for a week.

DITRANSITIVE

(f) Ted donated five hundred dollars to his favorite charity.

TRANSITIVE

(g) Wilma married Fred in a rock quarry.

TRANSITIVE

(h) Sam bought flowers for his mom.

TRANSITIVE

(i) The cat frequently sits on the front porch.

INTRANSITIVE

(j) She gave a raise to her best employee for his great work.

TRANSITIVE

3. (20 pts) For each sentence below, indicate whether the main verb appears in an *active* voice verb phrase or a *passive* voice verb phrase.

- (a) Dr. Seuss has written many books.

ACTIVE

- (b) Tim will be organizing a charity event.

ACTIVE

- (c) Cathy has been hired by IBM.

PASSIVE

- (d) Walter will be evaluated for a raise in October.

PASSIVE

- (e) Tropical storm Fred has strengthened into a hurricane.

ACTIVE

- (f) The battle is being fought on several fronts.

PASSIVE

- (g) The cougar was hiding in a bush.

ACTIVE

- (h) The dog has been taught twenty difficult tricks.

PASSIVE

- (i) She will have achieved a record in gymnastics.

ACTIVE

- (j) He should have won the award.

ACTIVE

4. (20 pts) Consider the following morphology rules and dictionary:

	Suffix	Prefix	Replacement Chars	POS of root word	POS of derived word
<i>Rule #1</i>	s	-	-	NOUN	NOUN
<i>Rule #2</i>	s	-	-	VERB	VERB
<i>Rule #3</i>	er	-	-	VERB	NOUN
<i>Rule #4</i>	-	re	-	VERB	VERB
<i>Rule #5</i>	-	anti	-	NOUN	ADJECTIVE

Dictionary	
Word	Part-of-Speech
seizure	NOUN
form	VERB

For each word below, indicate whether that word *CAN* or *CANNOT* be successfully derived as having the specified part-of-speech using the morphology rules and dictionary above:

- (a) antiseizure ADJECTIVE

CAN

- (b) seizures VERB

CANNOT

- (c) antiseizures NOUN

CANNOT

- (d) antiseizures ADJECTIVE

CAN

- (e) reforms NOUN

CANNOT

- (f) reforms VERB

CAN

- (g) antireform ADJECTIVE

CANNOT

(h) rereform VERB

CAN

(i) reformer NOUN

CAN

(j) reformers VERB

CANNOT

Question #5 is for CS-6340 students ONLY!

5. (15 pts) Consider the following five subcategorization frames:

NP
NP NP
PP(against)
PP(from) PP(to)
VP(to)

For each verb below, list ALL of the subcategorization frames in the list above that should be associated with the verb. If a verb should not have ANY of these subcategorization frames, then give the answer *NONE*.

HINT: most of the verbs should have 1 or 2 of the subcategorization frames in the list above.

- (a) snore

NONE

- (b) drive

NP ; PP(from) PP(to)

- (c) expect

NP ; VP(to)

- (d) fight

NP; PP(against)

- (e) sip

NP

- (f) sing

NP; NP NP

- (g) lean

PP(against)

(h) smile

NONE

(i) lend

NP NP

(j) increase

NP; PP(from) PP(to)