1 2

1.1 a

All occurences of the string cat or hat: /(cat—hat)/

1.2 b

All occurences of the strings tte or the: /(tte—the)/

1.3 c

Any words which are a single letter followed by the letters at:

1.4 d

Any occurence of at preceded by any letter except v:

```
/([^v]at)/
```

1.5 e

Any occurence of at preceded by any letters except c or h:

```
/([^ch]at)/
```

1.6 f

Any occurence of cat or rat that is not at the beginning of the line: /()/

2 3

((great)*grand)?(([Ff]a—[Mm]o)ther) matches: all of the above

3 4

3.1 a

All the occurences of cat: /(cat)/

3.2 b

All the occurences of cat and cats: /(cat—cats)/

3.3 c

All the occurences of cat or Cat if it's at the beginning of the line:

```
/(^\cat|Cat)/
```

3.4 d

All the occurences of cats only if it is at the end of the line:

```
/(cats$)/m
```

4 5

All of the words that would match the regular expression, (dog(gy—gie)?pupp(y—ie)—canine)s?, are: dog, doggy, doggie, puppy, puppie, canine, canines.

5 6

5.1 a

Any capitalization: /(bork)/i

5.2 b

Any year between 1950 and 1990:

```
/(\d*19[5-8]|1990)/
```

5.3 c

Any form of the verb "sing":

```
/(\w*s[aiu]ng.*)/
```

5.4 d

All of the strings: "running water", "rushing water", and "flowing water":

```
/+.(water)/
```

5.5 e

Any odd integer:

```
/(\d*[13579]$)/
```

5.6 f

The strings "and/or" and "red oak", but not "drop", "dog", or "d4o16":

```
/(^[ar].+)/
```

5.7 g

A random social security number with or without dashes between the numeric groups:

```
/(\d*.+9)/
```