

McCrum Prob. 1.1

Define precision and atomic weights:

```
> Digits:=4:H:=1:C:=12:unprotect(O):O:=16:F:=19:C1:=35.5:
```

Calculate relative molar masses (RMM):

(1) polybutene

```
> 'RMM'=1000*(C+H*2+C+H+(C*2+H*5));
```

$$RMM = 56000$$

(2) polyvinyl fluoride

```
> 'RMM'=1000*(C+H*2+C+H+F);
```

$$RMM = 46000$$

(3) polyvinylidene chloride

```
> 'RMM'=1000*(C+H*2+C+Cl*2);
```

$$RMM = 97000.$$

(4) polybutylene

```
> 'RMM'=1000*(C+H*2+C+(C+H*3)*2);
```

$$RMM = 56000$$

(5) polyvinyl alcohol

```
> 'RMM'=1000*(C+H*2+C+H+O+H);
```

$$RMM = 44000$$

(6) polymethacrylate

```
> 'RMM'=1000*(C+H*3+C+O+O+C+H+C+H*2);
```

$$RMM = 86000$$

