(1.) 4 + 4i here is the problem

=  $4[\cos 45 + i \sin 45]$  change to polar form

(2.)  $-\sqrt{3} + i$  here is the problem

=  $2[(-\sqrt{3}/2) + (1/2)i]$  factor 2 out front like this

=  $2[\cos 150 + i \sin 150]$  change to polar form

(3.)  $(\sqrt{3}/2)$  - (1/2)i here is the problem

=  $\cos 330 + i \sin 330$  change to polar form

(4.) -1 + 0i here is the problem

=  $\cos 180 + i \sin 180$  change to polar form

(5.) 0 + i here is the problem

= cos 90 + i sin 90 change to polar form

(6.)  $-3 - 3\sqrt{3}$  here is the problem

= 3(-1 -  $\sqrt{3}$ ) factor

=  $6[(-1/2) + (-\sqrt{3}/2)]$  factor

=  $6 \left[\cos 240 + i \sin 240\right]$  change to polar form

(7.)  $\sqrt{3}$  - i here is the problem

 $= 2[(\sqrt{3}/2) - (1/2)i]$  factor

=  $2[\cos 330 - i \sin 330]$  change to polar form

(8.)  $\sqrt{2} + i\sqrt{2}$  here is the problem

=  $4[(\sqrt{2}/2) + i(\sqrt{2}/2)]$  factor

= 4 [cos 45 + i sin 45] write in polar form

```
(9.) 0 + 3i here is the problem
```

$$=$$
 3(0 + i) factor

$$=$$
 3[cos 90 + i sin 90] write in polar form

$$(10.)$$
 -2 + 0i here is the problem

$$= 2[-1 + 0i]$$
 factor

(11.) 
$$-\sqrt{3}$$
 – I here is the problem

$$= 2[(-\sqrt{3}/2) - (1/2)i]$$
 factor

$$=$$
 2[cos 210 - I sin 210]

(12.) 
$$1 + I$$
 here is the problem

= 
$$\sqrt{2}[(\sqrt{2}/2) + I(\sqrt{2}/2)]$$
 factor

$$= \sqrt{2} [\cos 45 + I \sin 45]$$

$$(13.)$$
 5 + 5i here is the problem

$$5\sqrt{2} [(\sqrt{2}/2) + I (\sqrt{2}/2)]$$
 factor

= 
$$5\sqrt{2}$$
 [cos 45 + I sin 45] write in polar form

(14.) 
$$-1 + i\sqrt{3}$$
 here is the problem

= 
$$2[(-1/2) + i(\sqrt{3}/2)]$$
 factor

(15.) 
$$-2 - 2i\sqrt{3}$$
 here is the problem

= 
$$4[(-1/2) + i(\sqrt{3}/2)]$$
 factor

```
= 4[\cos 120 + I \sin 120] write in polar form
```

$$(17.)$$
  $(1/2)$   $(\cos 60 + i \sin 60)$  here is the problem

= 
$$(1/4) + i(\sqrt{3}/4)$$
 use the unit circle

$$(18.)$$
 2  $(\cos 0 + i \sin 0)$  here is the problem

$$(19.)$$
 3  $(\cos 330 + i \sin 330)$  here is the problem

= 
$$3[(\sqrt{3}/2) + i(-1/2)]$$
 use the unit circle

(20.) 4 (
$$\cos$$
 225 +  $i$   $\sin$  225) here is the problem

= 
$$4[(-\sqrt{2}/2) - i(\sqrt{2}/2)]$$
 use the unit circle

$$=$$
  $-2\sqrt{2}$  -  $i\sqrt{2}$  multiply

(21.) 
$$\sqrt{2}[\cos(-45) + i \sin(-45)]$$
 here is the problem

$$=$$
 1 - I multiply

(22.) 
$$\cos (-pi/6) + i \sin (-pi/6)$$
 here is the problem

= 
$$(\sqrt{3}/2)$$
 -  $(i/2)$  use the unit circle

(23.) 
$$2[\cos (3pi/4) + i \sin (3pi/4)]$$
 here is the problem

= 
$$-\sqrt{2} + i\sqrt{2}$$
 use the unit circle

(24.) 
$$4[\cos (pi/2) + i \sin (pi/2)]$$
 here is the problem