

REG NO:727822TUAD046
 EXP 2
 PROBLEM FOR PRACTICE

PROBLEM 1

INPUT:

```
X~dnorm(150,50)
pnorm(200,150,50,lower.tail=FALSE)
pnorm(170,150,50,lower.tail=TRUE)-pnorm(120,150,50,lower.tail=TRUE)
pnorm(75,150,50,lower.tail=TRUE)
```

OUTPUT:

```
> X~dnorm(150,50)
X ~ dnorm(150, 50)
> pnorm(200,150,50,lower.tail=FALSE)
[1] 0.1586553
> pnorm(170,150,50,lower.tail=TRUE)-pnorm(120,150,50,lower.tail=TRUE)
[1] 0.3811686
> pnorm(75,150,50,lower.tail=TRUE)
[1] 0.0668072
```

PROBLEM 2

INPUT:

```
2000*pnorm(2150,2040,60,lower.tail=FALSE)
2000*pnorm(1950,2040,60,lower.tail=TRUE)
2000*pnorm(2160,2040,60,lower.tail=TRUE)-pnorm(1920,2040,60,lower.tail=TRUE)
```

OUTPUT:

```
> 2000*pnorm(2150,2040,60,lower.tail=FALSE)
[1] 66.75302
> 2000*pnorm(1950,2040,60,lower.tail=TRUE)
[1] 133.6144
> 2000*pnorm(2160,2040,60,lower.tail=TRUE)-pnorm(1920,2040,60,lower.tail=TRUE)
[1] 1954.477
```

PROBLEM 3

INPUT:

```
X~binom(527,112)
pnorm(500,527,112,lower.tail=FALSE)
```

OUTPUT:

```
> X~binom(527,112)
X ~ binom(527, 112)
> pnorm(500,527,112,lower.tail=FALSE)
[1] 0.5952501
```

PROBLEM 4

INPUT:

```
X~binom(4300,750)
pnorm(4200,4300,750,lower.tail=TRUE)-pnorm(2500,4300,750,lower.tail=TRUE)
```

OUTPUT:

```
> X~binom(4300,750)
X ~ binom(4300, 750)
> pnorm(4200,4300,750,lower.tail=TRUE)-pnorm(2500,4300,750,lower.tail=TRUE)
[1] 0.4387673
```